THOMSON MULTIMEDIA

Brandt FERGUSON SABA **TELEFUNKEN** **THOMSON**

VIDEO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

V12

THOMSON
SCENIUM
ON/STANDBY
Super VHS
OPEN
S-VHS
TV PROG.
RESET
REC LINK
VCR
0:00:00
PAUSE
RECORD
STOP / EJECT
SHOWVIEW

V12 S1G VSH2050G
V12 S2G VSH2080G

THOMSON

WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 351 028 80 - 1199 / 4,8M - V12 S1/2G Print. MALGOGNE/SAILLOUR - AVRILLÉ

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SPECIFICATIONS

GENERALS

POWER : AC 220 - 240 V~, 50/60 Hz
POWER CONSUMPTION : Power ON : 24 W
Power OFF : 5,5 W
DIMENSIONS : 400 (W) x 94 (H) x 347 (D) mm
WEIGHT : 4 Kg.
FORMAT : S-VHS/VHS PAL Standard
MAX. RECORDING TIME : SP: 240 mn with E-240 video cassette
LP: 480 mn with E-240 video cassette
ACCESSORIES : RF cable, infrared remote control unit, “R6” battery x 2.

VIDEO/AUDIO

SIGNAL SYSTEM : PAL-type colour signal and CCIR monochrome signal, 625 lines 50 fields
RECORDING SYSTEM : DA4 (Double Azimuth) head helical scan system
SIGNAL-TO-NOISE RATIO : 45 dB
HORIZONTAL RESOLUTION : 250 lines (VHS)
400 lines (S-VHS)
FREQUENCY RANGE : 70 Hz to 10,000 Hz (Normal audio)
20 Hz to 20,000 Hz (Hi-Fi audio)
INPUT/OUTPUT : 21-pin SCART connectors: IN/OUT x 1, IN/DECODER x 1
RCA connectors: **VSH 2080** AUDIO IN/OUT x 1, VIDEO IN x 1
VSH 2050 AUDIO IN/OUT x 1
S-Video connectors: IN/OUT x 1

TUNER/TIMER

TV CHANNEL STORAGE CAPACITY : 99 positions (+ AUX position)
TUNING SYSTEM : Frequency synthesized tuner
CHANNEL COVERAGE : VHF 47 - 89/104 - 300/302 - 470 MHz
UHF 470 - 862 MHz
AERIAL OUTPUT : UHF channels 22 - 69 (Adjustable)
MEMORY BACKUP TIME : **VSH 2080** Approx. 60 mn.
VSH 2050 Approx. 10 mn.

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SECTION 3
ELECTRICAL ADJUSTMENT

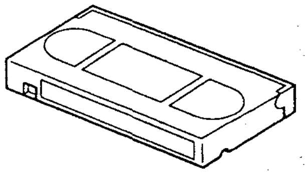
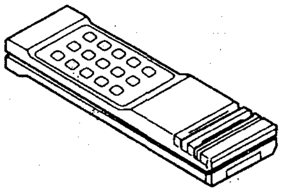
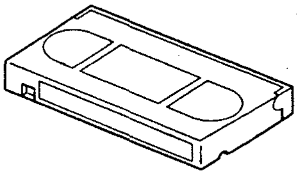
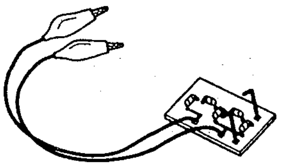
3.1 PRECAUTION

Electrical adjustment are required after replacing circuit components and certain mechanical parts. It is important to perform these adjustments only after all repairs and replacements have been completed. Also do not attempt these adjustments unless the proper equipments is available.

3.1.1 Required test equipment

① Colour television or monitor
② Oscilloscope: wide-band,dual-trace,triggered delayed sweep
③ Frequency counter
④ Signal generator: RF/IF sweep/marker
⑤ Signal generator: PAL colour bar, stairstep
⑥ Recording tape (VHS tape/S-VHS tape)
⑦ Digit-key remote controller(provided)

3.1.2 Required adjustment tools

Alignment tape(SP) MHPE 10405000	Presetting unit 76000899
	
Alignment tape (S-VHS, SP/LP, colour bar) MH-2H 76000840	See schematic diagram Fig. 3-3-4 page 5
	

3.1.3 Colour bar signal,colour bar pattern

- PAL colour bar signal

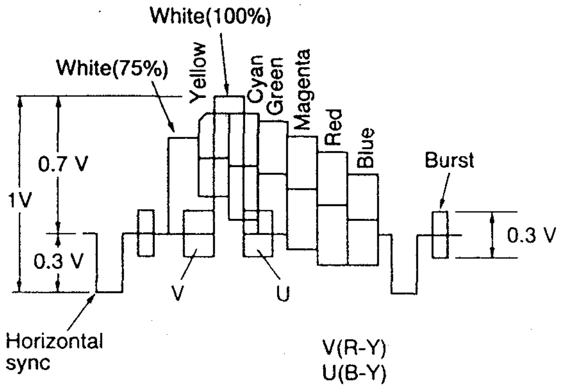


Fig.3-1-1 PAL colour bar signal waveform

- PAL colour bar pattern

(75%)

White	Yellow	Cyan	Green	Magenta	Red	Blue
V	U	White 100%			Black	

Fig.3-1-2 PAL colour bar pattern

3.2 SERVO CIRCUIT

Notes: • *Unless otherwise specified,all measurement points and adjustment parts are located on the MAIN BOARD.*
• *Set the VCR to the mode A by the remote controller.*

Note:
The system control circuit of this model has an automatic recognition about the ON-OFF control of the ***DOCTOR SYSTEM.***

3.2.1 PB switching point

Signal	• Alignment tape [MHPE], Stairstep • Alignment tape [MHP], Stairstep
Mode	• PB • TBC : OFF
Equipment	• Oscilloscope
Measurement point	• VIDEO OUT TERMINAL
Trigger slope (-)	• TP111(D.FF)
Adjustment tool	• Presetting unit 76000899
Specification	• 8.0 ± 0.5H [MHPE] • 7.5 ± 0.5H [MHP]

Note: • *Use only the "E" and "F" buttons, depressing other buttons during adjustment may cause adjustment errors. VSH 2080*

(1) Playback the stairstep signal of the alignment tape [MHPE].
(2) Connect an oscilloscope to VIDEO OUT TERMINAL and TP111 (negative slope), and then observe VIDEO OUT TERMINAL.
(3) Adjust by pressing the "E" or "F" buttons of the presetting unit so that the switching point becomes 8.0 ± 0.5H from V.sync.
(4) Depress the STOP button.
(5) Playback the stairstep signal of the alignment tape[MHP].
(6) Adjust by pressing the "E" or "F" buttons of the presetting unit so that the switching point becomes 7.5 ± 0.5H from V.sync.
(7) Depress the STOP button.

Note: • *Use only the "O" button, depressing other buttons during adjustment may cause adjustment errors. VSH 2050*

(1) Playback the stairstep signal of the alignment tape.
(2) Connect an oscilloscope to VIDEO OUT TERMINAL and TP111 (negative slope), and then observe VIDEO OUT TERMINAL.
(3) Press the "O" button of the presetting unit.
(4) The adjustment is performed automatically.
Once the adjustment is performed, the VCR will go into the STOP mode.
(5) Playback the alignment tape again, confirm the switching point (See Fig. 3-2-2).

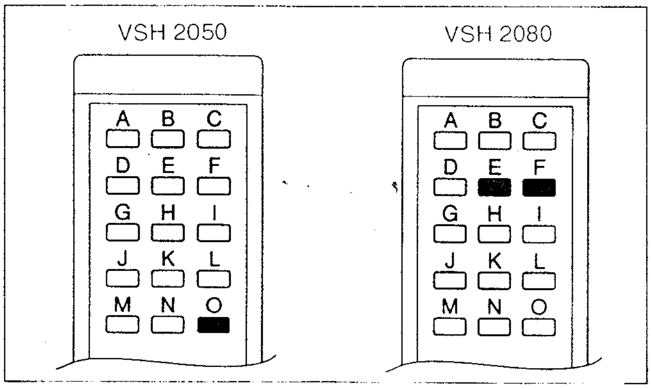


Fig. 3-2-1 Presetting unit

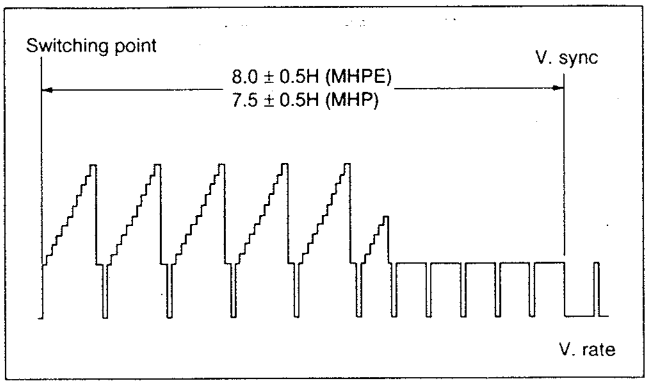


Fig. 3-2-2 PB switching point

3.2.2 Slow tracking preset

Signal	• Tuner or colour bar
Mode	• SP/LP : REC → PB(SLOW) • S-VHS
Equipment	• TV-Monitor
Adjustment tool	• Presetting unit 76000899
Specification	• Minimum noise

Note: • *Use only the "B" and "C" buttons, depressing other buttons during adjustment may cause adjustment errors.*

(1) Record a colour bar signal in the SP mode.
(2) Playback the recorded signal on the FWD slow mode.
(3) Set the tracking control to the centre position by simultaneously pressing the CH "+" and "−" buttons.
(4) Observe the display on the TV monitor and adjust for optimum noise condition (best tracking) by depressing the "B " or "C" buttons of the presetting unit.
(5) Depress the STOP button.
(6) Confirm that the bar noise is not visible on the TV monitor in the slow mode.
(7) Repeat steps (2) to (6) in the REV slow mode.
(8) Repeat steps (1) to (7) in the LP mode.

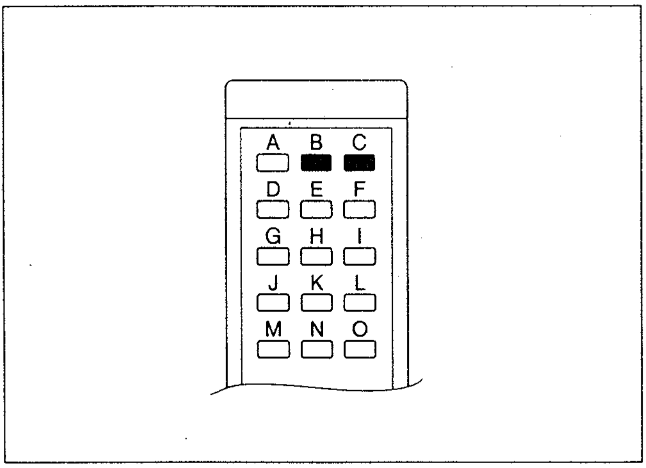


Fig. 3-2-3 Presetting unit

3.3 VIDEO CIRCUIT

Notes:
- *Unless otherwise specified,all measurement points and adjustment parts are located on the MAIN BOARD.*
- *VIDEO circuit adjustments are performed by the EVR system by use of the presetting unit and digit-key remote controller.*
- *S-INPUT means Y/C separated video signal in the chart.*
- *Set the VCR to the mode A by the remote controller.*
- *Unless otherwise specified, set the VCR to the following mode.*

B.E.S.T	OFF
PICTURE CONTROL	NORMAL
TBC	ON

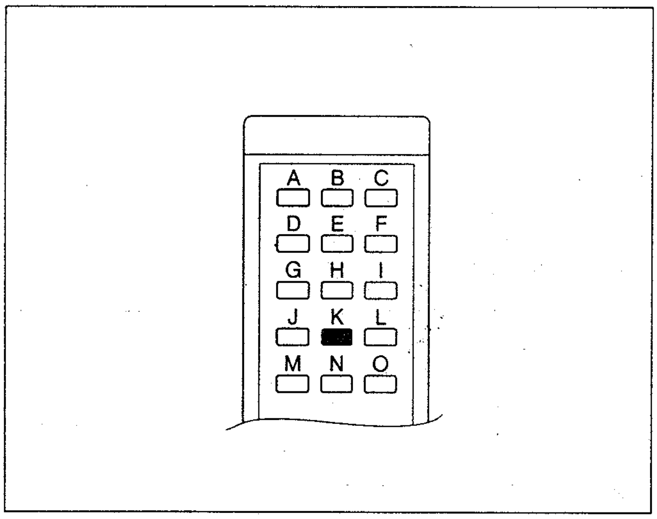


Fig. 3-3-1 Presetting unit

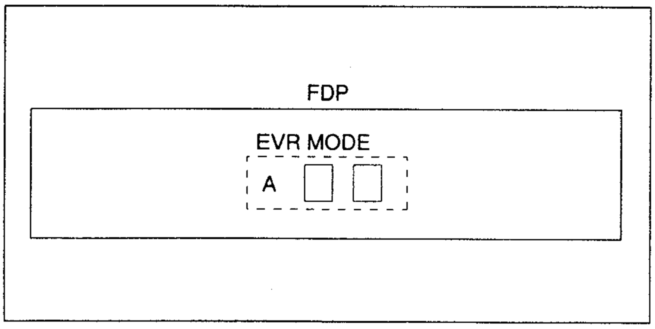


Fig. 3-3-2 EVR mode

3.3.1 EE Y level

Signal	• Colour bar
Mode	• EE
Equipment	• Oscilloscope
Measurement point	• Y OUT TERMINAL (75 ohm TERMINATION)
Adjustment tool	• Presetting unit 76000899 • Digit-key remote controller
EVR mode	• A : 11
Specification	• 1.00 ± 0.03 Vp-p (terminated)

(1) Connect an oscilloscope to Y OUT TERMINAL.

(2) Set the EVR mode by pressing the "K" button of the presetting unit.

(3) Set "A : 11" by twice pressing 1 button of the remote controller.

(4) Adjust the CH "+" or "–" buttons for 1.00 ± 0.03 Vp-p. (See Fig. 3-3-3.)

(5) Set the normal VCR mode by pressing the "K" button of the presetting unit again so adjustment data is memorized.

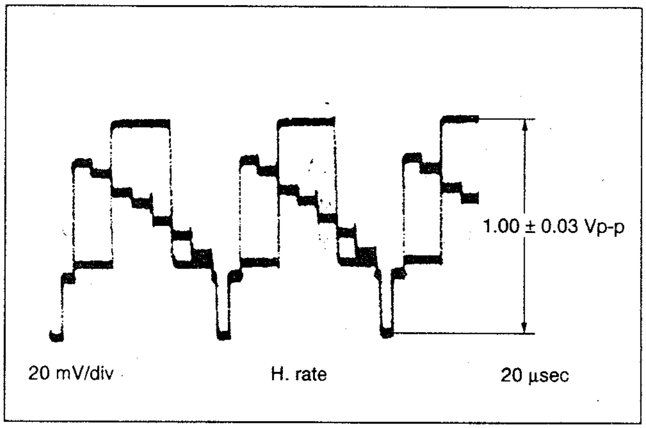


Fig. 3-3-3 EE Y level

3.3.2 SP/LP REC colour level

Signal	• Alignment tape [MH-2H] • Colour bar
Mode	• PB • REC → PB : SP/LP • S-VHS
Equipment	• Oscilloscope
Measurement point	• PB COLOUR
Trigger slope (–)	• TP111 (D.FF)
Adjustment tool	• Presetting unit 76000899 • Digit-key remote controller • LPF fixture
EVR mode	• A : 2
Specification	• "B" x 150 ± 5% : SP • "B" x 110 ± 5% : LP

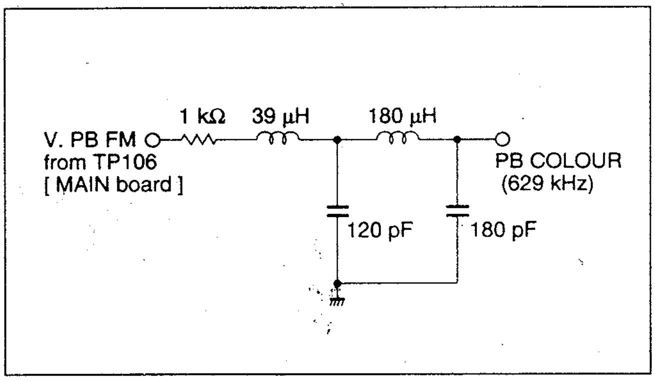


Fig. 3-3-4 LPF

(1) Connect an oscilloscope to PB COLOUR of a LPF (refer to Fig. 3-3-4) and TP111 (negative slope) on the MAIN board.
(2) Playback the SP colour bar signal of the MH-2H alignment tape.
(3) Adjust by pressing the CH "+" or "–" buttons of the Front panel for maximum level of the color waveform and make a note of the higher colour level "B".
(4) Press the STOP/EJECT button and eject the MH-2H alignment tape.
(5) Set the EVR mode by pressing the "K" button of the presetting unit.
(6) Set "A : 2" by pressing 2 button of the remote controller.
(7) Before recording, adjust the CH "+" or "–" buttons of the remote controller so that the higher level channel becomes 150 ± 5% : SP (110 ± 5% : LP) of the note "B" level during playback as shown in Fig. 3-3-5.
(8) Record a colour bar signal in the SP (LP) mode, and playback the recorded colour bar signal.
(9) Set the normal VCR mode by pressing the "K" button again so adjustment data is memorized.

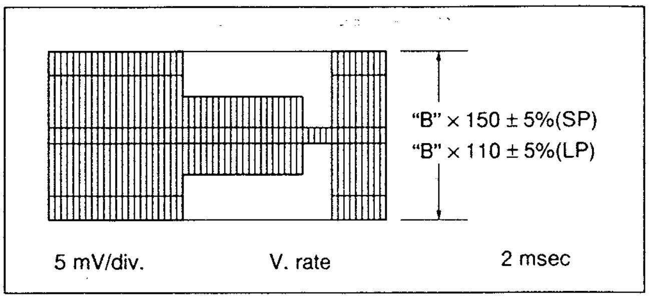


Fig. 3-3-5 REC colour level

3.3.3 PB Y level (S-VHS/VHS)

Signal	• Colour bar
Mode	• REC → PB : SP • S-VHS/VHS
Equipment	• Oscilloscope
Measurement point	• Y OUT TERMINAL (75 ohm TERMINATION)
Adjustment tool	• Presetting unit 76000899 • Digit-key remote controller
EVR mode	• A : 11
Specification	• 1.00 ± 0.03 Vp-p (terminated)

(1) Connect an oscilloscope to Y OUT TERMINAL.
(2) Set the EVR mode by pressing the "K" button of the presetting unit.
(3) Set "A : 11" by twice pressing 1 button of the remote controller.
(4) Record a colour bar signal in the S-VHS mode, and playback the recorded colour bar signal.
(5) Adjust the CH "+" or "–" buttons for 1.00 ± 0.03 Vp-p as shown in Fig. 3-3-6.
(6) Set the normal VCR mode by pressing the "K" button of the presetting unit again so adjustment data is memorized.
(7) Repeat steps (1) to (6) in the VHS mode.

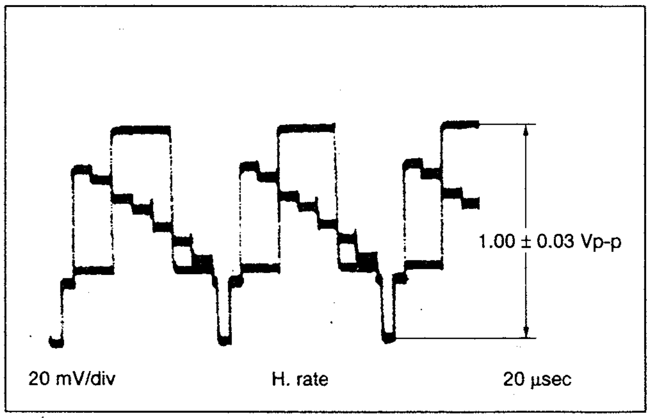


Fig. 3-3-6 PB Y level

3.3.4 S-VHS VIDEO EQ

Signal	• S INPUT • Video sweep
Mode	• REC → PB : SP/LP • S-VHS • Picture control REC : Normal PB : Edit
Equipment	• Oscilloscope
Measurement point	• Y OUT TERMINAL (75 ohm TERMINATION)
Trigger slope (–)	• TP111 (D.FF)
Adjustment tool	• Presetting unit 76000899 • Digit-key remote controller
EVR mode	• A : 3
Specification	• 3.6 ± 0.4 scale : SP • 3.2 ± 0.4 scale : LP

(1) Connect an oscilloscope to Y OUT TERMINAL and TP111 (negative slope).
(2) Record a video sweep signal in the S-VHS SP mode, then play it back.
(3) Set the EVR mode by pressing the "K" button of the presetting unit.
(4) Set "A : 3" by pressing 3 button of the remote controller.
(5) When assuming the 100 KHz sweep signal marker on the bigger channel is four scales on the oscilloscope, adjust the CH "+" or "–" buttons on the front panel or the Digit-key remote controller so that the 3 MHz is set at 3.6 ± 0.4 scale (–1 ± 1.0 dB) while observing Y OUT of the S output. (See Fig. 3-3-7.)
(6) Set the normal VCR mode by pressing the "K" button of the presetting unit again so adjustment data is memorized.
(7) Carry out the step (3) and (4) in the S-VHS LP mode.
(8) When assuming the 100 kHz sweep signal marker on the bigger channel is four scales on the oscilloscope, adjust the CH "+" or "–" buttons on the front panel or the Digit-key remote controller so that the 3 MHz is set at 3.2 ± 0.4 scale (–2 ± 1.0 dB) while observing Y OUT of the S output. (See Fig. 3-3-7.)

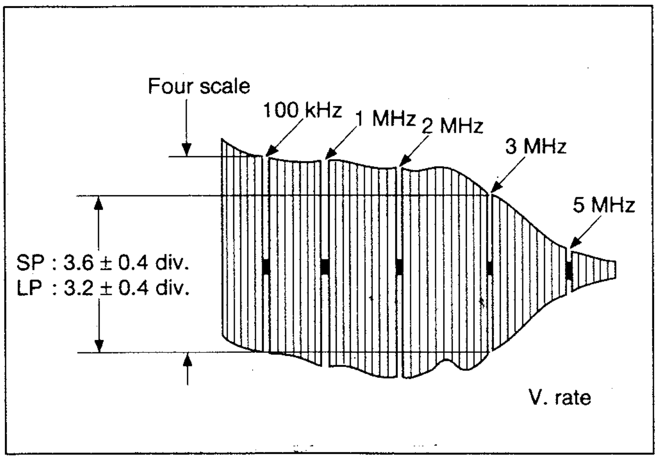


Fig. 3-3-7 S-VHS VIDEO EQ

3.3.5 D/A level

Signal	• Colour bar
Mode	• EE • S-VHS
Equipment	• Oscilloscope
Measurement point	• CN1003-3 pin (Y OUT) [3D or 2D SVHS board]
Adjustment part	• VR 1201 (D/A LEVEL) VSH 2050 VR 1401 (D/A LEVEL) VSH 2080
Specification (NOTE)	• 2.05 Vp-p (REFERENCE VALUE)

(1) Connect the oscilloscope to the CN1003-3 pin(Y OUT) 3D SVHS or 2D SVHS board.
(2) Confirm the Y level value during external S input.
(3) Switch the input signal to the external input, then adjust the VR 1401 on the 3D SVHS board or the VR 1201 on the 2D SVHS board so that the Y level value becomes the same level value witch was confirmed at the step (2).

Note: • *The adjusted value of 2.05 Vp-p is a reference value which should be obtained during external S input. The value should be adjusted to the one which was confirmed at step (2).*

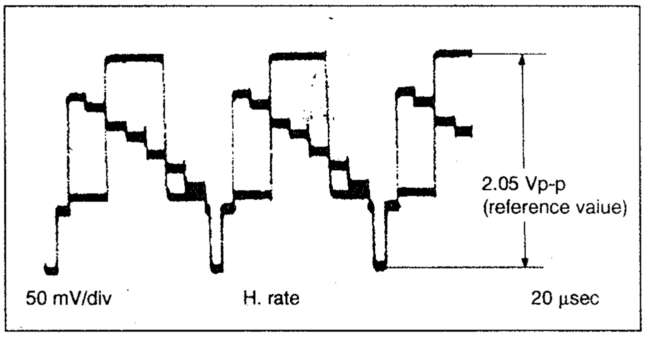


Fig. 3-3-8 D/A LEVEL

3.3.6 Pilot burst level

Signal	• Colour bar
Mode	• EE • S-VHS
Equipment	• Oscilloscope
Measurement point	• TP1001 (FSC PHASE) [3D or 2D SVHS board]
Adjustment part	• VR1002 (P. BURST LEVEL) [3D or 2D SVHS board]
Specification	• "B" x 110 ± 10%

(1) Connect the oscilloscope to the TP1001 (FSC PHASE) on the 3D or 2D SVHS board.
(2) Load an S-VHS tape then set the unit to the S-VHS EE mode.
(3) Adjust the VR 1002 of the 3D or 2D SVHS so that the pilot burst level becomes "B" x 110 ± 10% against the value of the burst level "B".

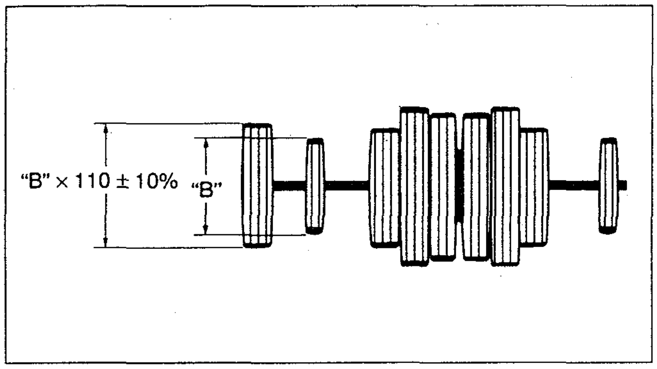


Fig. 3-3-9 PILOT BURST LEVEL

3.3.7 Auto picture

Signal	• Monoscope
Mode	• REC → PB : SP/LP • S-VHS
Adjustment tool	• Presetting unit 76000899
Specification	• STOP mode

(1) Record a monoscope signal in the SP mode.
(2) Playback the recorded signal.
(3) Press the "L" button of the presetting unit during playback.
(4) Confirm that the VCR will go into the STOP mode.
(5) Repeat steps (2) to (4) in the LP mode.

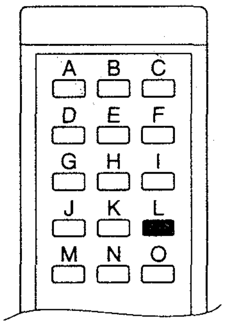


Fig. 3-3-10 Presetting unit

3.4 AUDIO CIRCUIT

Notes: • *Unless otherwise specified, all measurement point and adjustment parts are located on the MAIN BOARD.*
• *This adjustment should be done after the video circuit SP and LP REC colour level are adjusted.*
• *GND(Ground) should be taken from the tuner board shield.*

3.4.1 REC FM level

Signal	• AUX • VIDEO : Colour bar • AUDIO : No signal
Mode	• REC → PB : LP • S-VHS • B.E.S.T : OFF
Equipment	• Oscilloscope
Measurement point	• TP2253 (A. PB FM)
Trigger slope (–)	• TP111 (D. FF)
Adjustment part	• VR2251 (A. REC. FM)
Specification	• 600 ± 100 mVp-p

(1) Connect an oscilloscope to TP2253.
(2) Record a colour bar signal without an audio signal in the S-VHS LP mode then playback.
(3) Adjust VR2251 for 600 ± 100 mVp-p playback level of higher channel level before recording.
(4) Confirm that the lower channel level is more than 450 mVp-p.

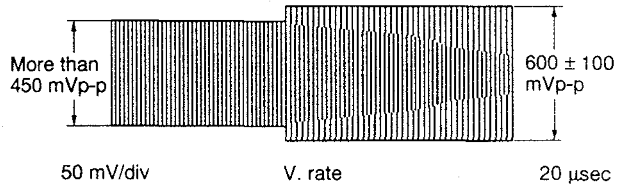


Fig. 3-4-1 Audio REC FM level

3.5 SYSCON CIRCUIT

Notes:
- *Unless otherwise specified,all measurement points and adjustment parts are located on the MAIN BOARD.*
- *When perform this adjustment,remove the MECHANISM assembly.*

3.5.1 Timer clock

Signal	• No signal
Mode	• EE
Equipment	• Frequency counter
Measurement point	• IC3001-PIN61
Adjustment part	• C3025 (TIMER CLOCK)
Specification	• 1024.008 ± 0.001 Hz [976.5549 ± 0.0010 μsec.]

(1) Connect the frequency counter to IC3001-PIN61.
(2) Connect the short wire between IC3001-PIN24 and Vcc(5V).
(3) Short the leads of capacitor C3026 once in order to reset IC3001.
(4) Disconnect the short wire between IC3001-PIN24 and Vcc then connect it again.
(5) Adjust C3025 trimmer capacitor so that the output from IC3001-PIN61 falls within 1024.008 ± 0.001 Hz (976.5549 ± 0.0010 μsec.) range.

3.6 ON SCREEN CIRCUIT

Note: • *Set the VCR to the mode A by the remote controller.*

3.6.1 Character position

Signal	• No signal
Mode	• EE
Equipment	• TV-monitor
Adjustment tool	• Presetting unit 76000899 • Digit-key remote controller
Specification	• Character centre

Note: • *Use only the "H" button, depressing other buttons during adjustment may cause adjustment errors.*

(1) Press the MENU button and display the on screen character.
(2) Observe the TV-monitor and centre position of character by pressing the "H" button of the presetting unit.

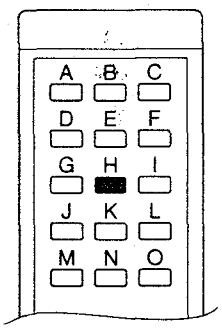


Fig. 3-6-1 Presetting unit

SECTION 4
CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions
The Components identified by the symbol ⚠ are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

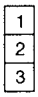
1) All resistance values are in ohm, 1/6 W, 1/8 W (refer to parts list).
   Chip resistors are 1/16 W.
   K: KΩ (1000Ω), M: MΩ (1000KΩ)
2) All capacitance values are in μF, (P: PF).
3) All inductance values are in μH, (m: mH).
4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

2. Indications of control voltage

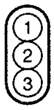
AUX : Active at high

$\overline{\text{AUX}}$ or AUX(L) : Active at low

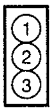
3. Interpreting Connector indications



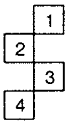
Removable connector



Wire soldered directly on board



Non-removable Board connector

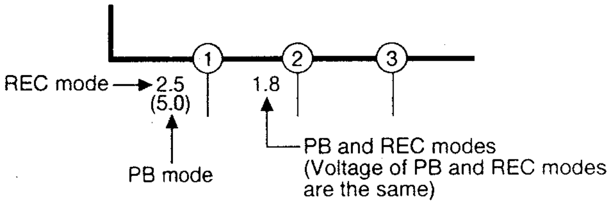


Board to Board

→
←
↔
Connected pattern on board
The arrows indicate signal path

4. Voltage measurement

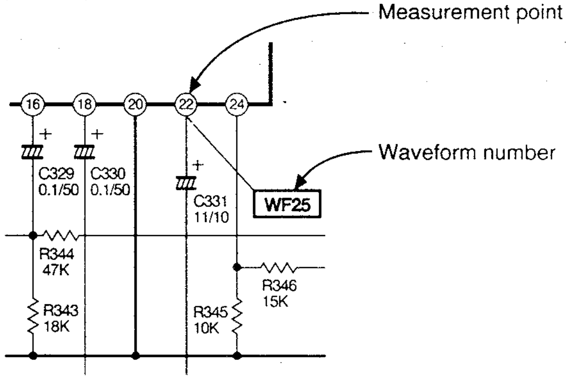
1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
   — : Unmeasurable or unnecessary to measure
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, Normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test charts in the E-E mode
4) Indication on schematic diagram
   Voltage Indications for REC and PB mode on the schematic diagram are as shown below.


①
②
③
REC mode
2.5
(5.0)
1.8
PB mode
PB and REC modes
(Voltage of PB and REC modes are the same)

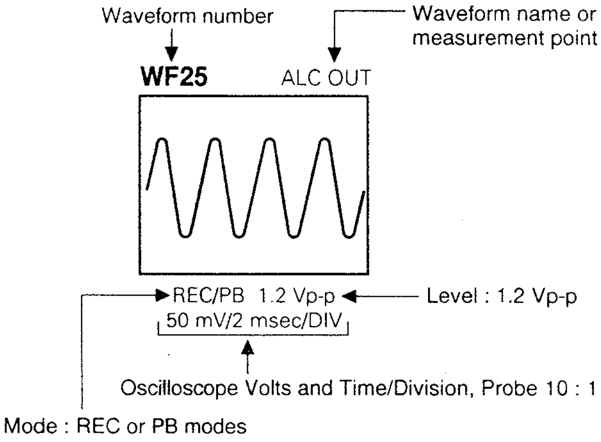
Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

5. Waveform measurement

1) Video circuits
   REC : Colour bar signal in SP mode, normal VHS mode
   PB : Alignment tape, colour bar SP mode, normal VHS mode
2) Audio circuits
   REC : 1KHz, –8 dBs sine wave signal in SP mode, normal VHS mode
   PB : REC then playback it
3) Movie Camera circuits
   Measured using a correctly illuminated gray scale or colour bar test chatrs in the E-E mode
4) Indication on schematic diagram
   Waveform indications on the schematic diagram are as shown below.


Measurement point
Waveform number
⑯
⑱
⑳
㉒
㉔
C329
0.1/50
C330
0.1/50
C331
11/10
WF25
R344
47K
R343
18K
R345
10K
R346
15K

5) Waveform indications


Waveform number
Waveform name or measurement point
WF25
ALC OUT
REC/PB 1.2 Vp-p
Level : 1.2 Vp-p
50 mV/2 msec/DIV
Oscilloscope Volts and Time/Division, Probe 10 : 1
Mode : REC or PB modes

6. Signal path Symbols

The arrows indicate the signal path as follows.

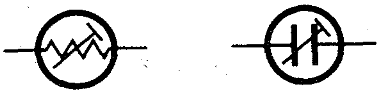
⇨	Playback signal path
▭➡	Playback and recording signal path
➡	Recording signal path (including E-E signal path)
⇨▷	Capstan servo path
➡▶	Drum servo path

(Example)

⇨	R-Y	Playback R-Y signal path
➡	Y	Recording Y signal path

7. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



8. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.

CIRCUIT BOARD NOTES

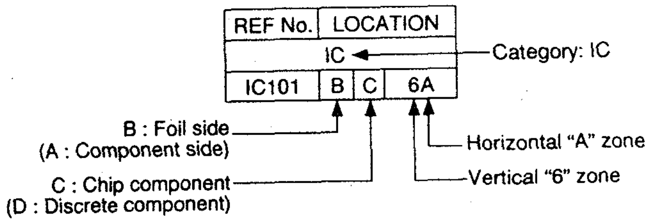
1. Foil and Component sides

1) Foil side (B side) :
Parts on the foil side seen from foil face (pattern face) are indicated.

2) Component side (A side) :
Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

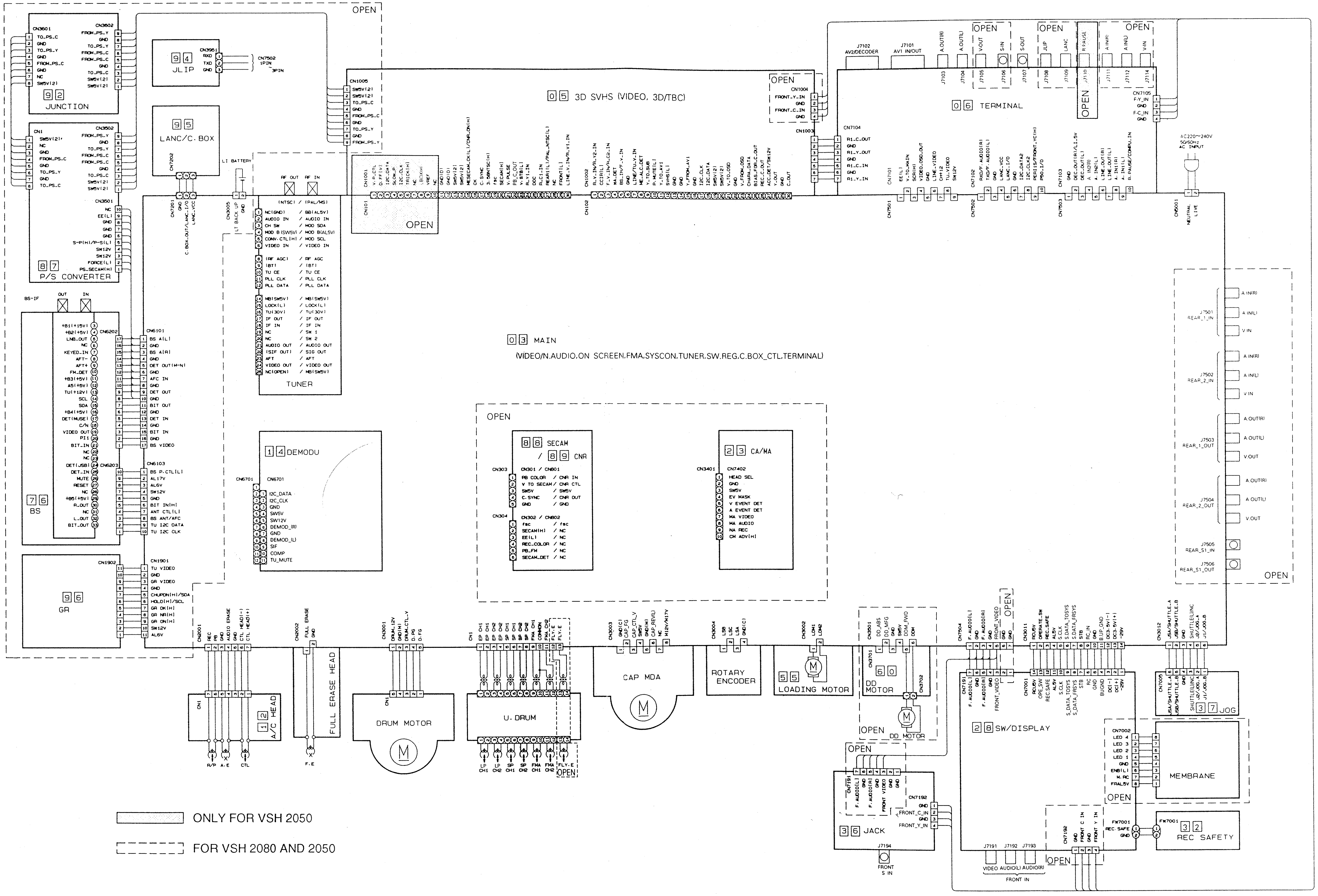
Parts location are indicated by guide scale on the circuit board.


REF No.
LOCATION
IC
Category: IC
IC101
B
C
6A
B : Foil side
(A : Component side)
C : Chip component
(D : Discrete component)
Horizontal "A" zone
Vertical "6" zone

Note:

For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

4.1 BOARD INTERCONNECTIONS

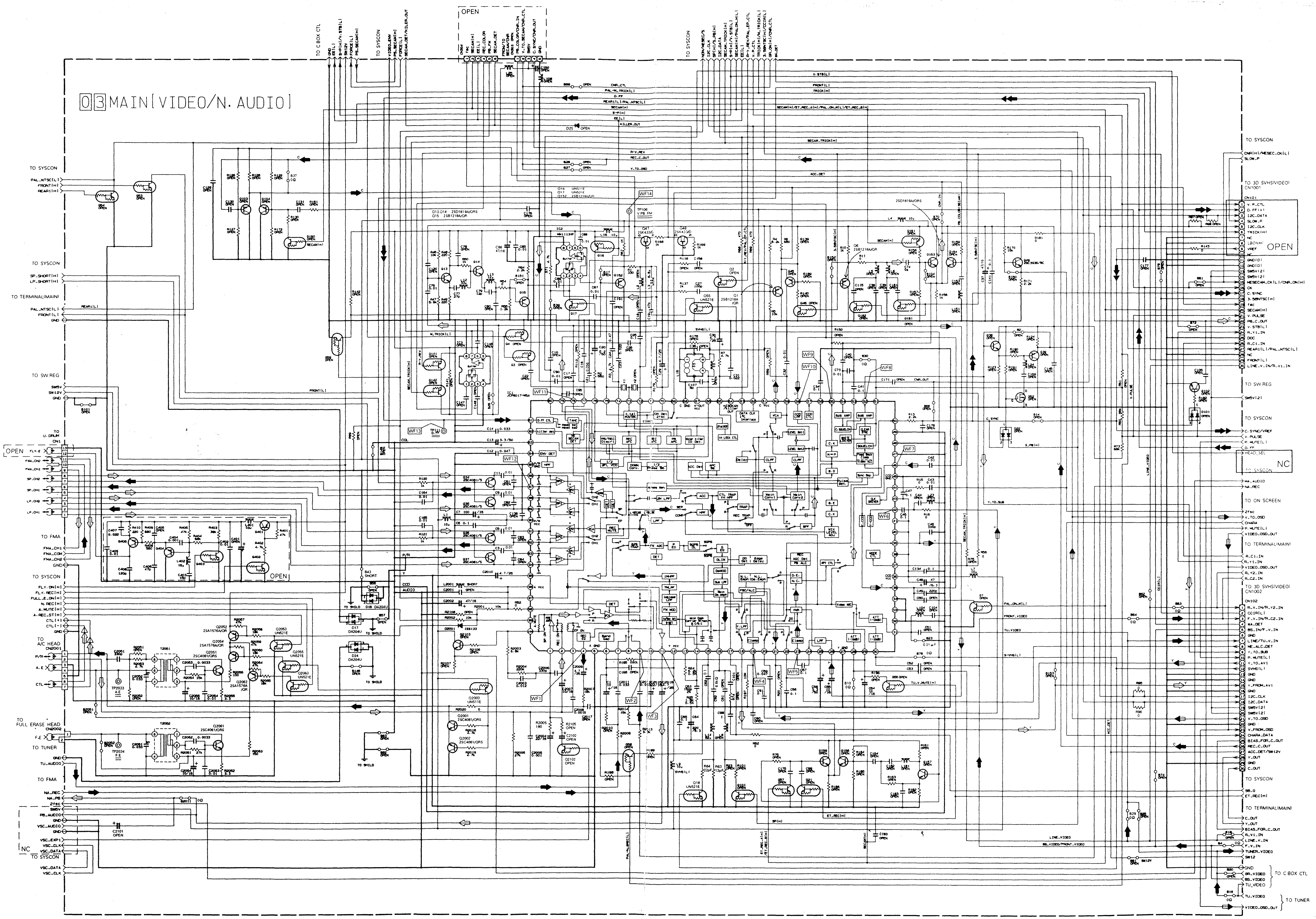

OPEN
9 2 JUNCTION
CN3601
CN3602
9 4 JLIP
CN3951
CN7502
9 5 LANC/C. BOX
CN7202
LI BATTERY
8 7 P/S CONVERTER
CN1
CN3502
CN3501
BS-IF
OUT
IN
7 6 BS
CN6202
CN6203
CN6101
CN6103
9 6 GR
CN1902
CN1901
CN7201
CN3005
TUNER
RF OUT
RF IN
(NTSC) / (PAL/MS)
1 4 DEMODU
CN6701
0 5 3D SVHS (VIDEO, 3D/TBC)
CN1005
CN1004
CN1003
CN1001
CN1002
CN101
CN102
0 3 MAIN
(VIDEO/N.AUDIO.ON SCREEN.FMA.SYSCON.TUNER.SW.REG.C.BOX_CTL.TERMINAL)
8 8 SECAM / 8 9 CNR
CN303
CN304
CN301 / CN801
CN302 / CN802
2 3 CA/MA
CN3401
CN7402
0 6 TERMINAL
J7102 AV2/DECODER
J7101 AV1 IN/OUT
CN7104
CN7105
CN7101
CN7102
CN7103
CN7501
CN7502
CN7503
CN5001
AC220~240V 50/60Hz AC INPUT
NEUTRAL
LIVE
J7501 REAR_1_IN
J7502 REAR_2_IN
J7503 REAR_1_OUT
J7504 REAR_2_OUT
J7505 REAR_S1_IN
J7506 REAR_S1_OUT
CN2001
1 2 A/C HEAD
R/P
A-E
CTL
CN2002
FULL ERASE HEAD
F.E
CN3001
DRUM MOTOR
U. DRUM
LP CH1
LP CH2
SP CH1
SP CH2
FMA CH1
FMA CH2
FLY-E
CN3003
CAP MDA
CN3004
ROTARY ENCODER
CN3002
5 5 LOADING MOTOR
CN3501
CN3701
6 0 DD MOTOR
CN3702
DD MOTOR
CN7504
CN7191
CN3011
CN7001
CN3012
CN7005
3 7 JOG
2 8 SW/DISPLAY
CN7002
MEMBRANE
CN7192
FW7001
3 2 REC SAFETY
3 6 JACK
J7194
FRONT S IN
J7191
J7192
J7193
VIDEO AUDIO(L) AUDIO(R)
FRONT IN

▨ ONLY FOR VSH 2050

[- - - -] FOR VSH 2080 AND 2050

NO	NAME
5 5	LOADING MOTOR
3 7	JOG
3 6	JACK
3 2	REC SAFETY
2 8	SW/DISPLAY
1 4	DEMODU
1 2	A/C HEAD
0 6	TERMINAL
0 5	3D SVHS
0 3	MAIN

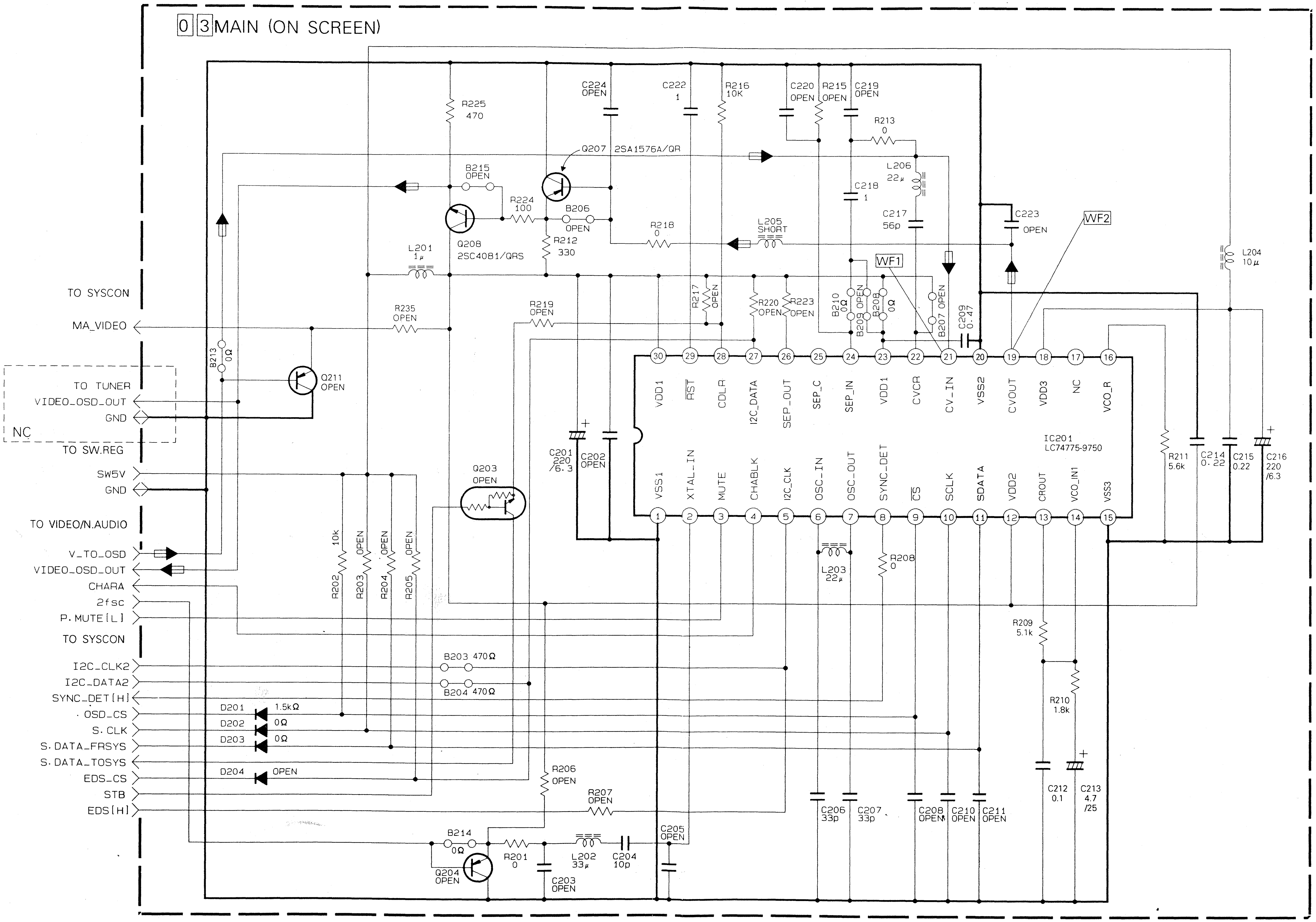
4.2 VIDEO/N.AUDIO SCHEMATIC DIAGRAM


03 MAIN[VIDEO/N. AUDIO]
OPEN
TO C BOX CTL
TO SYSCON
TO SW.REG
TO FMA
TO U.DRUM CN1
TO A/C HEAD CN2001
TO FULL ERASE HEAD CN2002
TO TUNER
TO TERMINAL(MAIN)
TO 3D SVHS(VIDEO) CN1001
TO 3D SVHS(VIDEO) CN1002
TO ON SCREEN
NC

▨ ONLY FOR VSH 2050

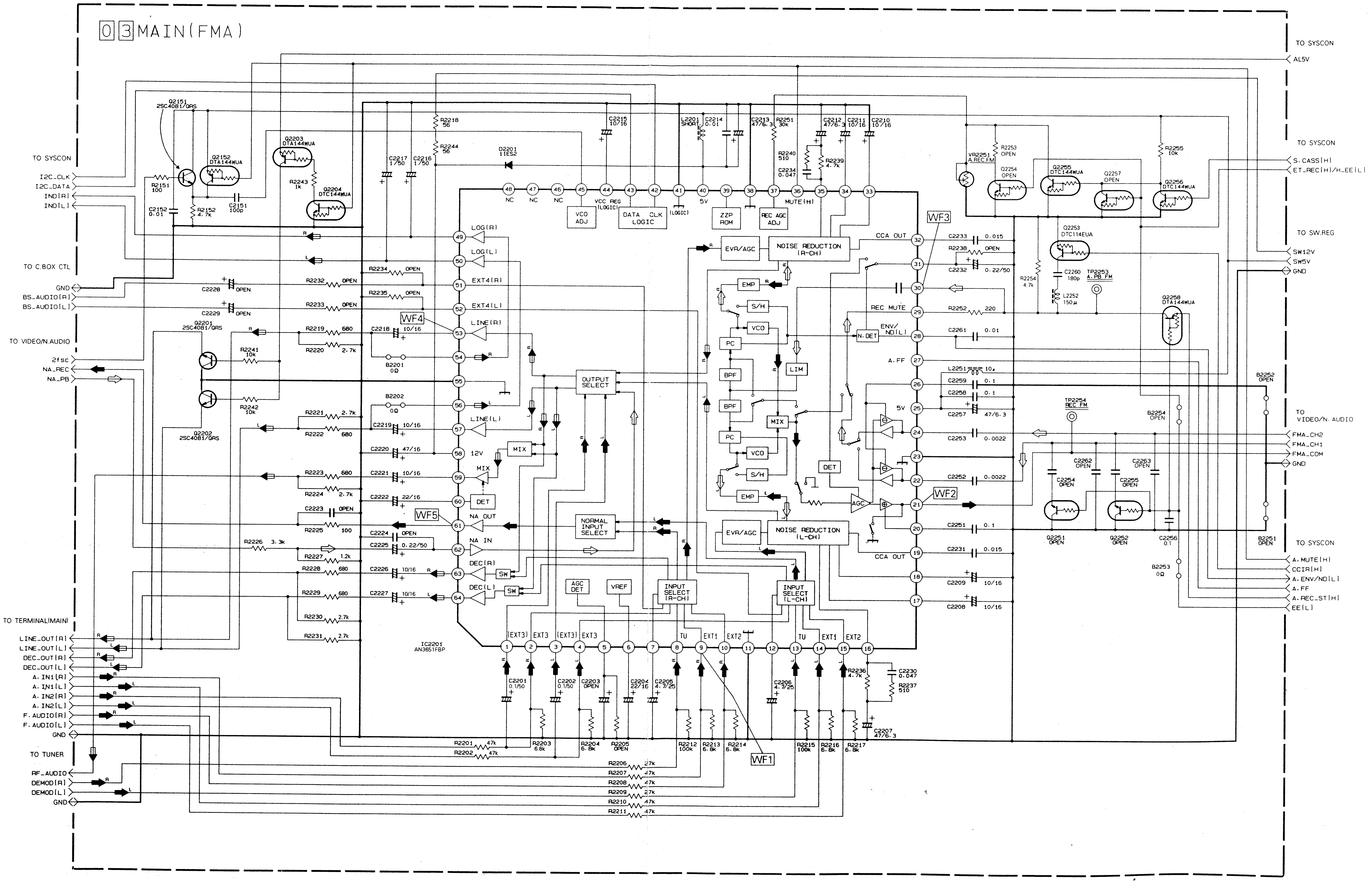
[- - - - - -] FOR VSH 2080 AND 2050

4.3 ON SCREEN SCHEMATIC DIAGRAM

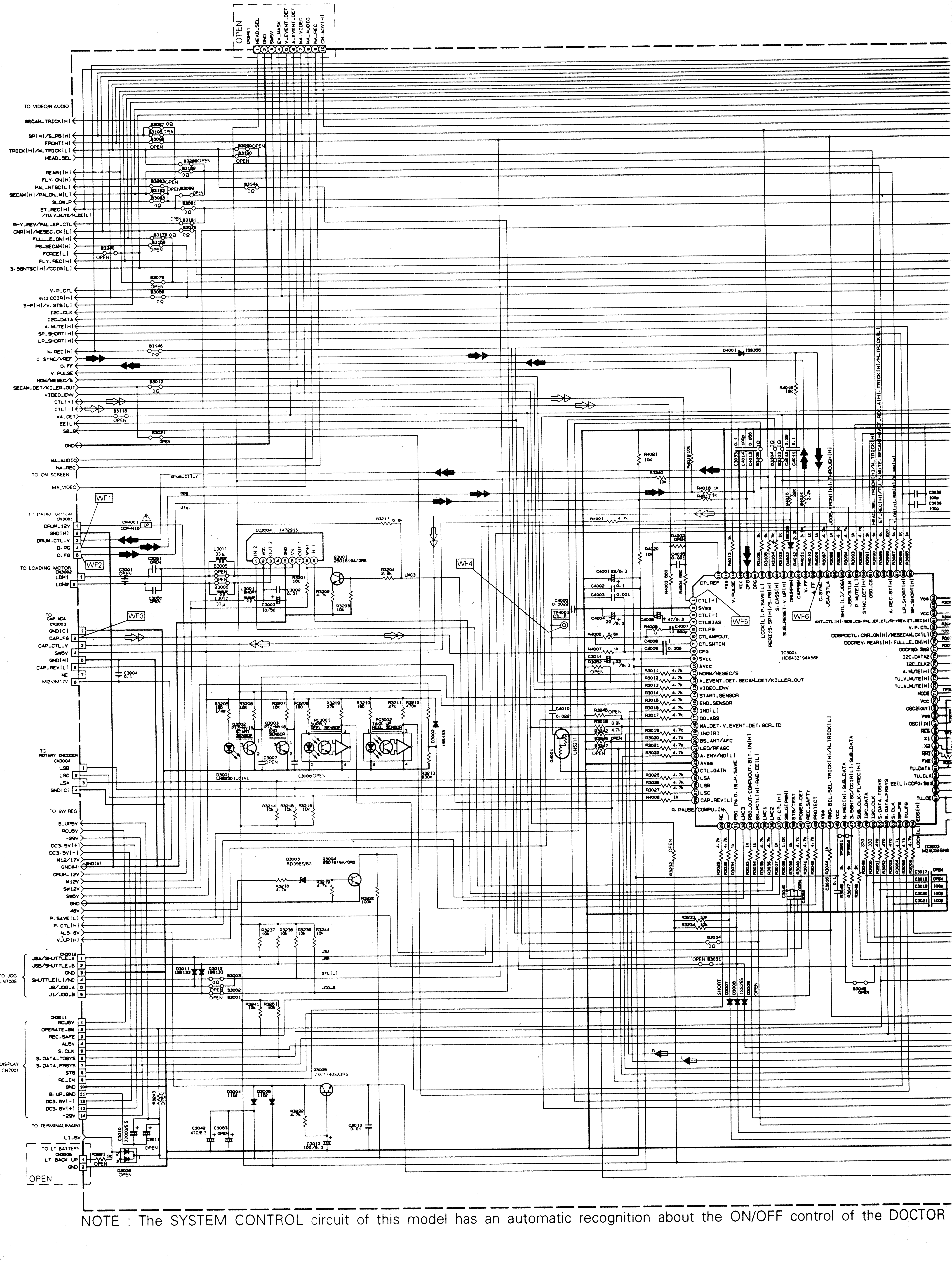


0 3 MAIN (ON SCREEN)
TO SYSCON
MA_VIDEO
TO TUNER
VIDEO_OSD_OUT
GND
NC
TO SW.REG
SW5V
GND
TO VIDEO/N.AUDIO
V_TO_OSD
VIDEO_OSD_OUT
CHARA
2fsc
P.MUTE[L]
TO SYSCON
I2C_CLK2
I2C_DATA2
SYNC_DET[H]
OSD_CS
S.CLK
S.DATA_FRSYS
S.DATA_TOSYS
EDS_CS
STB
EDS[H]
R225 470
C224 OPEN
C222 1
R216 10K
C220 OPEN
R215 OPEN
C219 OPEN
R213 0
Q207 2SA1576A/QR
B215 OPEN
R224 100
B206 OPEN
Q208 2SC4081/QRS
R212 330
R218 0
L205 SHORT
L206 22µ
C218 1
C217 56p
C223 OPEN
WF2
WF1
L201 1µ
L204 10µ
R235 OPEN
R219 OPEN
R217 OPEN
R220 OPEN
R223 OPEN
B210 0Ω
B209 OPEN
B208 0Ω
B207 OPEN
C209 0.47
B213 0Ω
Q211 OPEN
Q203 OPEN
C201 220 /6.3
C202 OPEN
VDD1
RST
CDLR
I2C_DATA
SEP_OUT
SEP_C
SEP_IN
VDD1
CVCR
CV_IN
VSS2
CVOUT
VDD3
NC
VCO_R
IC201 LC74775-9750
VSS1
XTAL_IN
MUTE
CHABLK
I2C_CLK
OSC_IN
OSC_OUT
SYNC_DET
CS
SCLK
SDATA
VDD2
CROUT
VCO_IN1
VSS3
R211 5.6k
C214 0.22
C215 0.22
C216 220 /6.3
R202 10k
R203 OPEN
R204 OPEN
R205 OPEN
L203 22µ
R208 0
R209 5.1k
R210 1.8k
B203 470Ω
B204 470Ω
D201 1.5kΩ
D202 0Ω
D203 0Ω
D204 OPEN
R206 OPEN
R207 OPEN
C212 0.1
C213 4.7 /25
C206 33p
C207 33p
C208 OPEN
C210 OPEN
C211 OPEN
C205 OPEN
B214 0Ω
Q204 OPEN
R201 0
C203 OPEN
L202 33µ
C204 10p

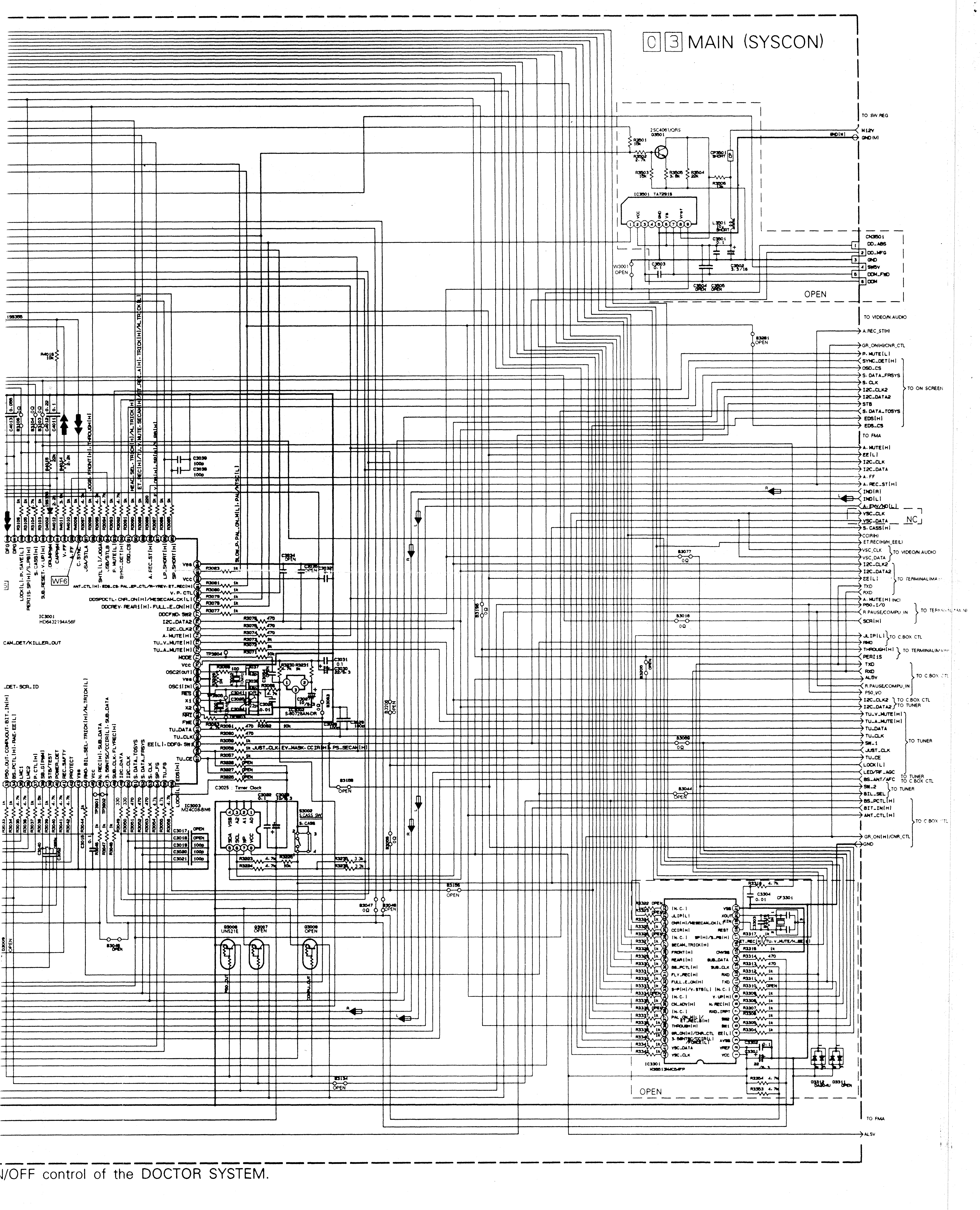
4.4 FMA SCHEMATIC DIAGRAM


03 MAIN(FMA)
TO SYSCON
I2C_CLK
I2C_DATA
IND(R)
IND(L)
TO C.BOX CTL
GND
BS_AUDIO(R)
BS_AUDIO(L)
TO VIDEO/N.AUDIO
2fsc
NA_REC
NA_PB
TO TERMINAL(MAIN)
LINE_OUT(R)
LINE_OUT(L)
DEC_OUT(R)
DEC_OUT(L)
A. IN1(R)
A. IN1(L)
A. IN2(R)
A. IN2(L)
F. AUDIO(R)
F. AUDIO(L)
GND
TO TUNER
RF_AUDIO
DEMOD(R)
DEMOD(L)
GND
TO SYSCON
AL5V
TO SYSCON
S. CASS(H)
ET_REC(H)/H_EE(L)
TO SW.REG
SW12V
SW5V
GND
TO VIDEO/N. AUDIO
FMA_CH2
FMA_CH1
FMA_COM
GND
TO SYSCON
A. MUTE(H)
CCIR(H)
A. ENV/ND(L)
A. FF
A. REC_ST(H)
EE(L)
Q2151 2SC4081/QRS
Q2152 DTA144WUA
Q2203 DTA144WUA
Q2204 DTC144WUA
Q2201 2SC4081/QRS
Q2202 2SC4081/QRS
R2151 100
C2152 0.01
R2152 4.7k
C2151 100p
R2243 1k
C2217 1/50
C2216 1/50
R2218 56
R2244 56
D2201 11ES2
C2215 10/16
L2201 SHORT
C2214 0.01
C2213 47/6.3
R2251 30k
R2240 510
C2234 0.047
R2239 4.7k
C2212 47/6.3
C2211 10/16
C2210 10/16
C2228 OPEN
C2229 OPEN
R2234 OPEN
R2232 OPEN
R2235 OPEN
R2233 OPEN
R2219 680
R2220 2.7k
C2218 10/16
R2241 10k
R2242 10k
B2201 0Ω
B2202 0Ω
R2221 2.7k
R2222 680
C2219 10/16
C2220 47/16
R2223 680
R2224 2.7k
C2221 10/16
C2222 22/16
C2223 OPEN
R2225 100
C2224 OPEN
C2225 0.22/50
R2226 3.3k
R2227 1.2k
R2228 680
C2226 10/16
R2229 680
C2227 10/16
R2230 2.7k
R2231 2.7k
IC2201 AN3651FBP
WF1
WF2
WF3
WF4
WF5
LOG(R)
LOG(L)
EXT4(R)
EXT4(L)
LINE(R)
LINE(L)
12V
MIX
DET
NA OUT
NA IN
DEC(R)
DEC(L)
SW
OUTPUT SELECT
NORMAL INPUT SELECT
AGC DET
VREF
INPUT SELECT (R-CH)
INPUT SELECT (L-CH)
NC
VCC REG (LOGIC)
VCO ADJ
DATA CLK LOGIC
(LOGIC)
5V
ZZP ROM
REC AGC ADJ
MUTE(H)
EVR/AGC
NOISE REDUCTION (R-CH)
NOISE REDUCTION (L-CH)
CCA OUT
EMP
S/H
VCO
PC
BPF
LIM
MIX
REC MUTE
ENV/ND(L)
N. DET
A. FF
AGC
(EXT3)
EXT3
TU
EXT1
EXT2
C2201 0.1/50
C2202 0.1/50
C2203 OPEN
C2204 22/16
C2205 4.7/25
C2206 4.7/25
R2236 4.7k
C2230 0.047
R2237 510
C2207 47/6.3
R2201 47k
R2202 47k
R2203 6.8k
R2204 6.8k
R2205 OPEN
R2212 100k
R2213 6.8k
R2214 6.8k
R2215 100k
R2216 6.8k
R2217 6.8k
R2206 27k
R2207 47k
R2208 47k
R2209 27k
R2210 47k
R2211 47k
C2233 0.015
R2238 OPEN
C2232 0.22/50
R2252 220
C2261 0.01
L2251 10μ
C2259 0.1
C2258 0.1
C2257 47/6.3
C2253 0.0022
C2252 0.0022
C2251 0.1
C2231 0.015
C2209 10/16
C2208 10/16
VR2251 A.REC.FM
R2253 OPEN
Q2254 OPEN
Q2255 DTC144WUA
Q2257 OPEN
Q2256 DTC144WUA
R2255 10k
Q2253 DTC114EUA
R2254 4.7k
C2260 180p
TP2253 A.PB FM
L2252 150μ
Q2258 DTA144WUA
B2252 OPEN
TP2254 REC FM
B2254 OPEN
C2262 OPEN
C2263 OPEN
C2254 OPEN
C2255 OPEN
Q2251 OPEN
Q2252 OPEN
C2256 0.1
B2251 OPEN
B2253 0Ω

4.5 SYSTEM CONTROL SCHEMATIC DIAGRAM

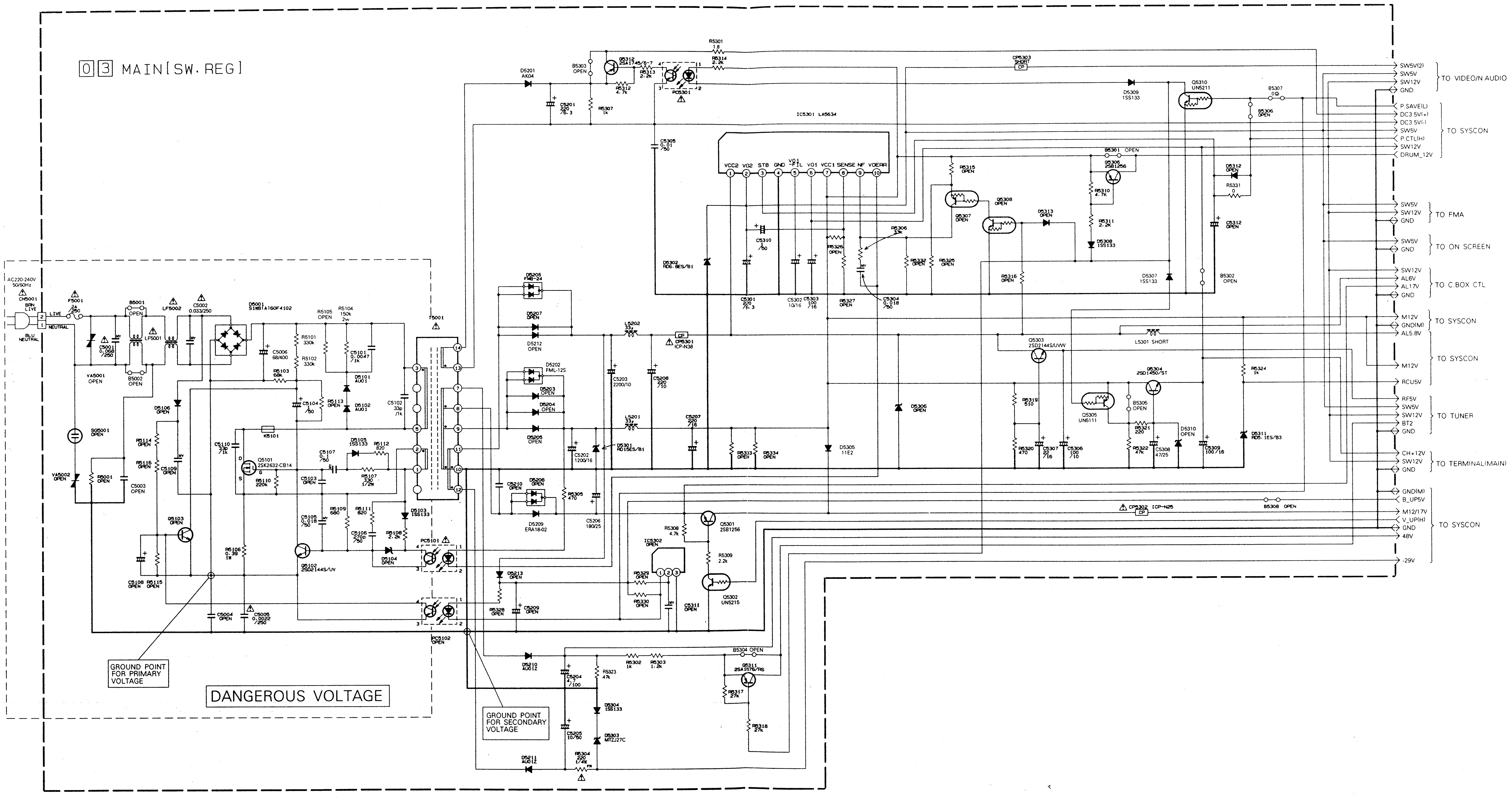

OPEN
CN3401
HEAD_SEL
GND
SW5V
EV_MASK
V_EVENT_DET
A_EVENT_DET
MA_VIDEO
MA_AUDIO
MA_REC
CH_ADV[H]
TO VIDEO/N.AUDIO
SECAM_TRICK[H]
SP[H]/S_PB[H]
FRONT[H]
TRICK[H]/M_TRICK[L]
HEAD_SEL
REAR1[H]
FLY.ON[H]
PAL_NTSC[L]
SECAM[H]/PALON_M[L]
SLOW_P
ET_REC[H]
/TU.V_MUTE/H_EE[L]
R-Y_REV/PAL_EP_CTL
CNR[H]/MESEC_CK[L]
FULL_E_ON[H]
PS_SECAM[H]
FORCE[L]
FLY.REC[H]
3.58NTSC[H]/CCIR[L]
V.P_CTL
(NC) CCIR[H]
S-P[H]/V.STB[L]
I2C_CLK
I2C_DATA
A.MUTE[H]
SP_SHORT[H]
LP_SHORT[H]
N.REC[H]
C.SYNC/VREF
D.FF
V.PULSE
NOM/MESEC/S
SECAM_DET/KILER_OUT
VIDEO_ENV
CTL[+]
CTL[-]
MA_DET
EE[L]
SB_G
GND
MA_AUDIO
MA_REC
TO ON SCREEN
MA_VIDEO
WF1
TO DRUM MOTOR
CN3001
DRUM_12V
GND[M]
DRUM_CTL_V
D.PG
D.FG
WF2
TO LOADING MOTOR
CN3002
LDM1
LDM2
TO
CAP MDA
CN3003
GND[C]
CAP_FG
CAP_CTL_V
SW5V
GND[M]
CAP_REV[L]
NC
M12V/M17V
WF3
TO
ROTARY ENCODER
CN3004
LSB
LSC
LSA
GND[C]
TO SW REG
B_UP5V
RCU5V
-29V
DC3.5V[+]
DC3.5V[-]
M12/17V
GND(M)
DRUM_12V
M12V
SW12V
SW5V
GND
48V
P.SAVE[L]
P.CTL[H]
AL5.5V
V_UP[H]
TO JOG
CN7005
CN3012
JSA/SHUTTLE_A
JSB/SHUTTLE_B
GND
SHUTTLE[L]/NC
J2/JOG_A
J1/JOG_B
TO SW/DISPLAY
CN7001
CN3011
RCU5V
OPERATE_SW
REC_SAFE
AL5V
S.CLK
S.DATA_TOSYS
S.DATA_FRSYS
STB
RC_IN
GND
B.UP_GND
DC3.5V[-]
DC3.5V[+]
-29V
TO TERMINAL(MAIN)
LI_5V
TO LT BATTERY
CN3005
LT BACK UP
GND
OPEN
IC3004 TA7291S
IC3001
HD6432194A56F
IC3003
M24C08-BN6
WF4
WF5
WF6
PC3001
SUPPLY
REEL SENSOR
PC3002
TAKE UP
REEL SENSOR
Q3001
2SD1819A/QRS
Q3004
2SD1819A/QRS
Q3005
2SC1740S/QRS
D3003
RD39ES/B3
D4001
1SS355
Q4001
UN5211
CTLREF
CTL[+]
CTL[-]
CTLBIAS
CTLFB
CTLAMPOUT
CTLSMTIN
CFG
SVCC
AVCC
NORM/MESEC/S
A_EVENT_DET.SECAM_DET/KILLER_OUT
VIDEO_ENV
START_SENSOR
END_SENSOR
MA_DET.V_EVENT_DET.SCR_ID
BS_ANT/AFC
LED/RFAGC
A.ENV/ND[L]
CTL_GAIN
LSA
LSB
LSC
CAP_REV[L]
R.PAUSE/COMPU_IN
V.PULSE
DPG
DFG
LOCK[L]/P.SAVE[L]
PERI[S:SP[H]/S_PB[H]
S.CASS[H]
SUB_RESET.V_UP[H]
DRUMPWM
CAPPWM
V.FF
C.SYNC
JSA/STLA
SHTL[L]/JOGA
JSB/STLB
P.MUTE[L]
SYNC_DET[H]
OSD_CS
A.REC_ST[H]
LP_SHORT[H]
SP_SHORT[H]
V.P.CTL
I2C_DATA2
I2C_CLK2
A.MUTE[H]
TU.V_MUTE[H]
TU.A_MUTE[H]
MODE
OSC2(OUT)
OSC1(IN)
RES
X1
X2
TU_DATA
TU_CLK
TU_CE
EE[L]:DOFG.SW
SP_FG
TU_FG
S.DATA_FRSYS
S.DATA_TOSYS
I2C_CLK
I2C_DATA
SUB_CLK.FLYREC[H]
3.58NTSC/CCIR[L].SUB_DATA
N.REC[H].SUB_DATA
PROTECT
REC_SAFTY
POWER_DET
STB/TEST
SB_G(PWM)
P.CTL[H]
LMC1
LMC2
LMC3
OPEN
SHORT
1SS355

NOTE : The SYSTEM CONTROL circuit of this model has an automatic recognition about the ON/OFF control of the DOCTOR

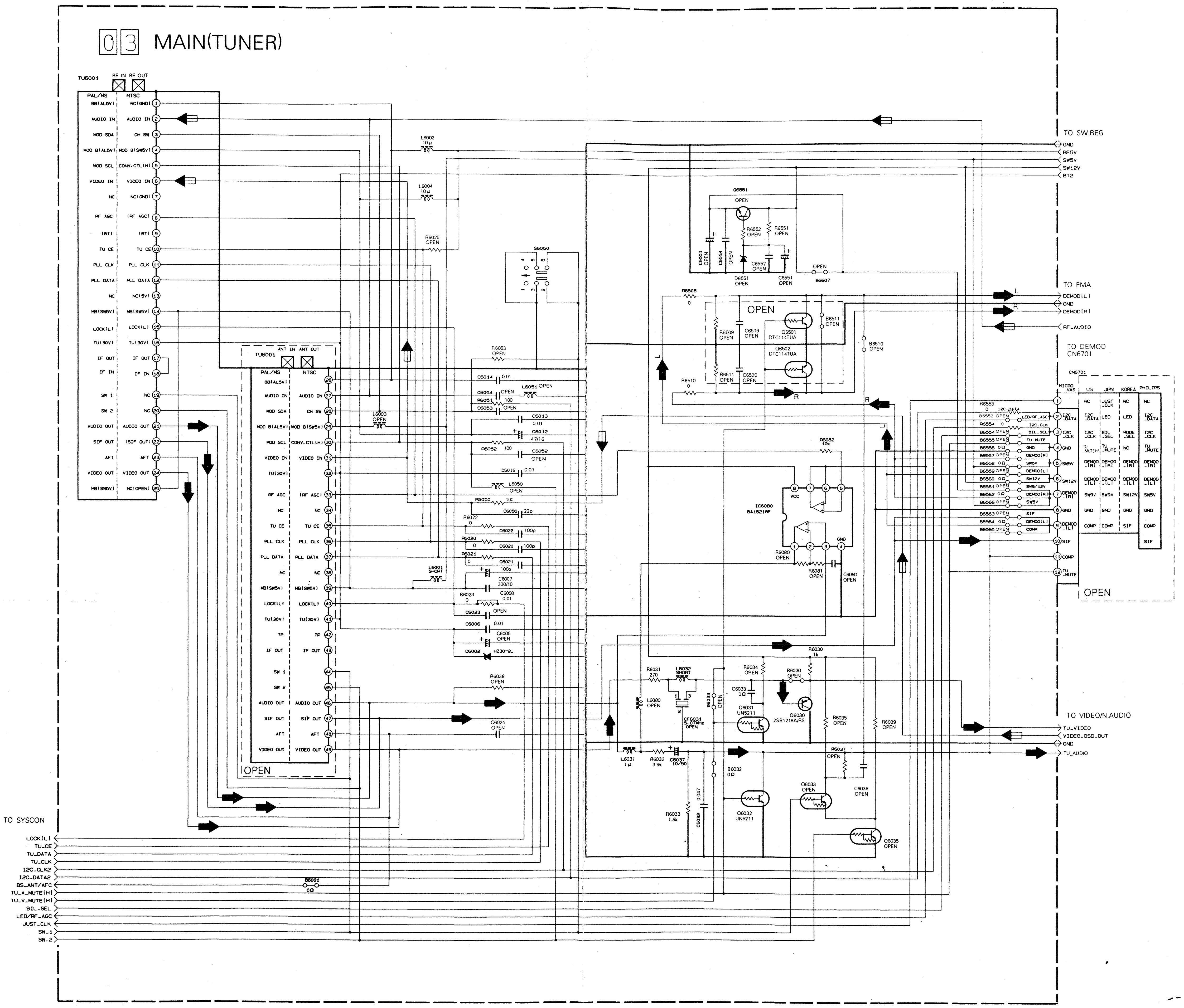

C 3 MAIN (SYSCON)
TO SW REG
M12V
GND(M)
2SC4081/QRS
Q3501
IC3501 TA7291S
CN3501
DD_ABS
DD_MFG
GND
SW5V
DDM_FWD
DDM
OPEN
W3001 OPEN
TO VIDEO/N AUDIO
A.REC_ST(H)
GR_ON(H)/CNR_CTL
P.MUTE(L)
SYNC_DET(H)
OSD_CS
S.DATA_FRSYS
S.CLK
I2C_CLK2
I2C_DATA2
STB
S.DATA_TOSYS
EDS(H)
EDS_CS
TO ON SCREEN
TO FMA
A.MUTE(H)
EE(L)
I2C_CLK
I2C_DATA
A.FF
A.REC_ST(H)
IND(R)
IND(L)
VSC_CLK
VSC_DATA
NC
S.CASS(H)
CCIR(H)
ET.REC(H)/H_EE(L)
TO VIDEO/N AUDIO
TO TERMINAL/MA
TXD
RXD
A.MUTE(H)(NC)
P50_I/O
R.PAUSE/COMPU_IN
SCR(H)
J.LIP(L)
RMO
THROUGH(H)
PERI1S
TO C BOX CTL
ALBV
P50_VO
TO TUNER
TU_V_MUTE(H)
TU_A_MUTE(H)
TU_DATA
TU_CLK
SW_1
JUST_CLK
TU_CE
LOCK(L)
LED/RF_AGC
BS_ANT/AFC
SW_2
BIL_SEL
BS_PCTL(H)
BIT_IN(H)
ANT_CTL(H)
GND
AL5V
IC3001 HD6432194A56F
IC3003 M24C08-BN6
C3025 : Timer Clock
S3002 S.CASS SW
IC3301 M38813M4C54FP
CF3301
Q3006 UN521E
Q3007 OPEN
Q3008 OPEN
P50_OUT
COMPU_OUT
WF6
CAM_DET/KILLER_OUT
DET_SCR_ID
SLOW_P.PAL_ON_M(L)/PAL/NTSC(L)
JOGE.FRONT(H)/THROUGH(H)
HEAD_SEL.TRICK(H)/AL.TRICK(H)
ET.REC(H)/TU.V.MUTE.SECAM(H)/ET.REC.A(H).TRICK(H)/AL.TRICK(L)
JUST_CLK.EV_MASK.CCIR(H).PS_SECAM(H)
D3313 DA204U
D3311 OPEN

N/OFF control of the DOCTOR SYSTEM.

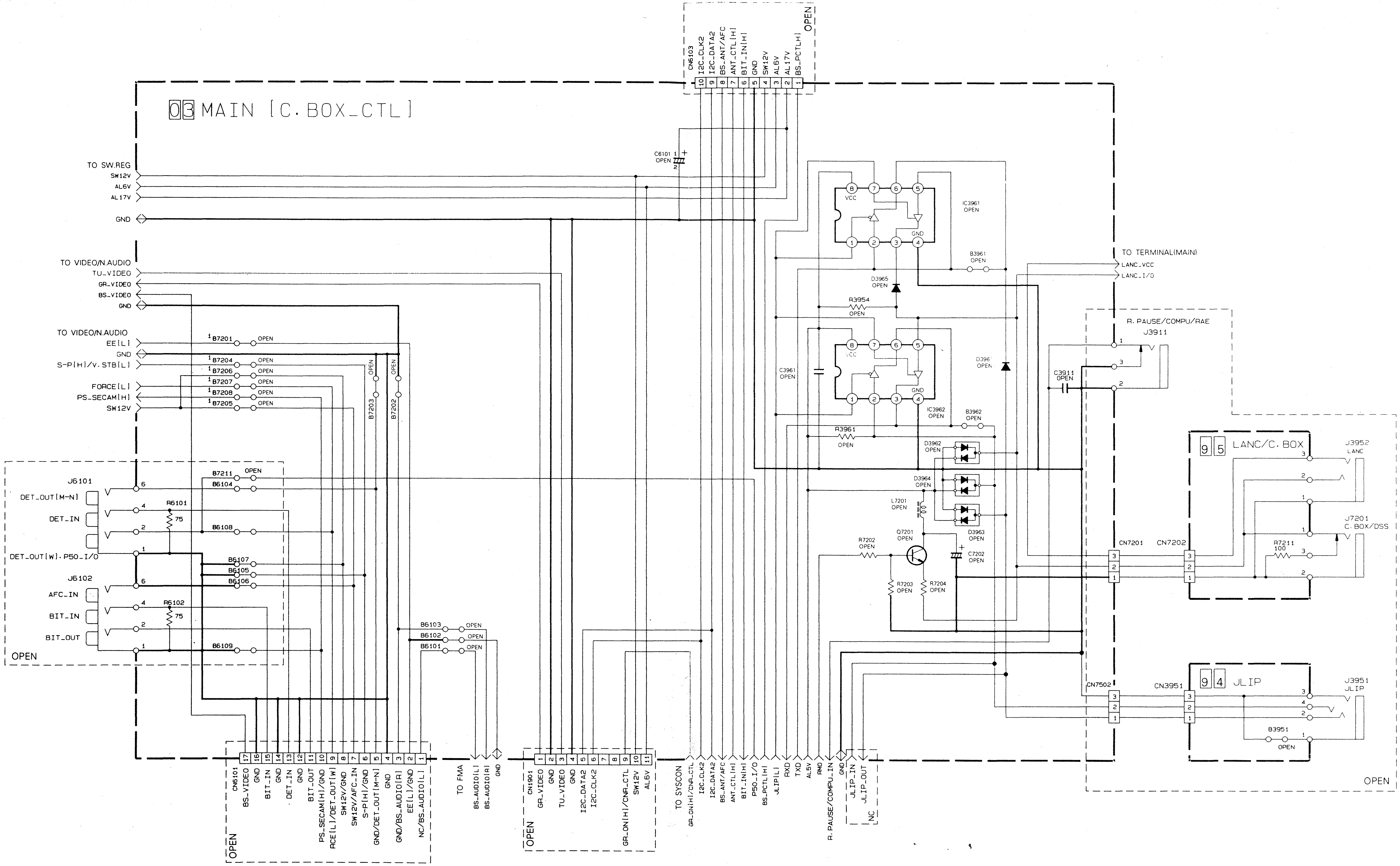
4.6 SWITCHING REGULATOR SCHEMATIC DIAGRAM


03 MAIN[SW. REG]
AC220-240V 50/60Hz
CN5001
LIVE
NEUTRAL
F5001
LF5002
LF5001
C5002 0.033/250
C5001 0.068 /250
B5001 OPEN
B5002 OPEN
VA5001 OPEN
VA5002 OPEN
SG5001 OPEN
R5001 OPEN
C5003 OPEN
D5001 S1WB(A)60F4102
R5105 OPEN
R5104 150k 2W
R5101 330k
R5102 330k
C5006 68/400
R5103 68k
C5101 0.0047 /1k
D5101 AU01
C5104 /50
R5113 OPEN
D5102 AU01
C5102 33p /1k
T5001
K5101
Q5101 2SK2632-CB14
R5110 220k
C5103 OPEN
C5107 0.1 /50
D5105 1SS133
R5112 820
R5107 330 1/2W
C5110 330p /1k
D5106 OPEN
R5114 OPEN
R5116 OPEN
C5109 OPEN
Q5103 OPEN
R5106 0.39 1W
C5105 0.018 /50
R5109 680
R5111 820
C5106 270p /50
R5108 2.2k
D5103 1SS133
Q5102 2SD2144S/UV
D5104 OPEN
PC5101
PC5102 OPEN
C5108 OPEN
R5115 OPEN
C5004 OPEN
C5005 0.0022 /250
GROUND POINT FOR PRIMARY VOLTAGE
DANGEROUS VOLTAGE
GROUND POINT FOR SECONDARY VOLTAGE
D5201 AK04
B5303 OPEN
Q5312 2SA1745/6-7
R5313 2.2k
R5312 4.7k
C5201 220 /6.3
R5307 1k
R5301 1.8
R5314 2.2k
PC5301
C5305 0.01 /50
IC5301 LA5634
VCC2 VO2 STB GND VO1 ADJ VO1 VCC1 SENSE NF VOERR
D5302 RD6.8ES/B1
C5310 /50
C5301 220 /6.3
C5302 10/16
C5303 100 /16
R5326 OPEN
R5327 OPEN
R5306 33k
R5332 OPEN
R5325 OPEN
C5304 0.018 /50
CP5303 SHORT
D5309 1SS133
Q5310 UN5211
B5307 0Ω
R5306 OPEN
B5301 OPEN
Q5306 2SB1256
R5315 OPEN
Q5308 OPEN
Q5307 OPEN
D5313 OPEN
R5310 4.7k
R5311 2.2k
D5308 1SS133
D5312 OPEN
R5331 0
C5312 OPEN
R5316 OPEN
D5307 1SS133
B5302 OPEN
D5205 FMB-24
D5207 OPEN
D5212 OPEN
D5202 FML-12S
D5203 OPEN
D5204 OPEN
D5206 OPEN
L5202 33μ
CP5301 ICP-N38
C5203 2200/10
C5208 220 /10
L5201 33μ
C5207 220 /16
C5202 1200/16
D5301 RD15ES/B1
R5333 OPEN
R5334 OPEN
D5305 11E2
D5306 OPEN
Q5303 2SD2144S/UVW
L5301 SHORT
Q5304 2SD1450/ST
R5324 1k
R5319 510
C5305 UN5111
B5305 OPEN
R5321 220
D5310 OPEN
D5311 RD5.1ES/B3
R5320 470
C5307 33 /16
C5306 100 /10
R5322 47k
C5308 47/25
C5309 100/16
C5210 OPEN
D5208 OPEN
R5305 470
D5209 ERA18-02
C5206 180/25
CP5302 ICP-N25
B5306 OPEN
Q5301 2SB1256
R5308 4.7k
IC5302 OPEN
R5309 2.2k
R5329 OPEN
R5330 OPEN
C5311 OPEN
Q5302 UN5215
D5213 OPEN
R5328 OPEN
C5209 OPEN
D5210 AU01Z
C5204 4.7 /100
R5323 47k
R5302 1k
R5303 1.2k
B5304 OPEN
Q5311 2SA1678/RS
R5317 27k
R5318 27k
D5304 1SS133
C5205 10/50
D5303 MTZJ27C
D5211 AU01Z
R5304 220 1/4W
SW5V(2)
SW5V
SW12V
GND
TO VIDEO/N AUDIO
P.SAVE(L)
DC3.5V(+)
DC3.5V(-)
SW5V
P.CTL(H)
SW12V
DRUM_12V
TO SYSCON
SW5V
SW12V
GND
TO FMA
SW5V
GND
TO ON SCREEN
SW12V
AL6V
AL17V
GND
TO C.BOX CTL
M12V
GND(M)
AL5.8V
TO SYSCON
M12V
RCU5V
TO SYSCON
RF5V
SW5V
SW12V
BT2
GND
TO TUNER
CH+12V
SW12V
GND
TO TERMINAL(MAIN)
GND(M)
B_UP5V
M12/17V
V_UP(H)
GND
48V
-29V
TO SYSCON

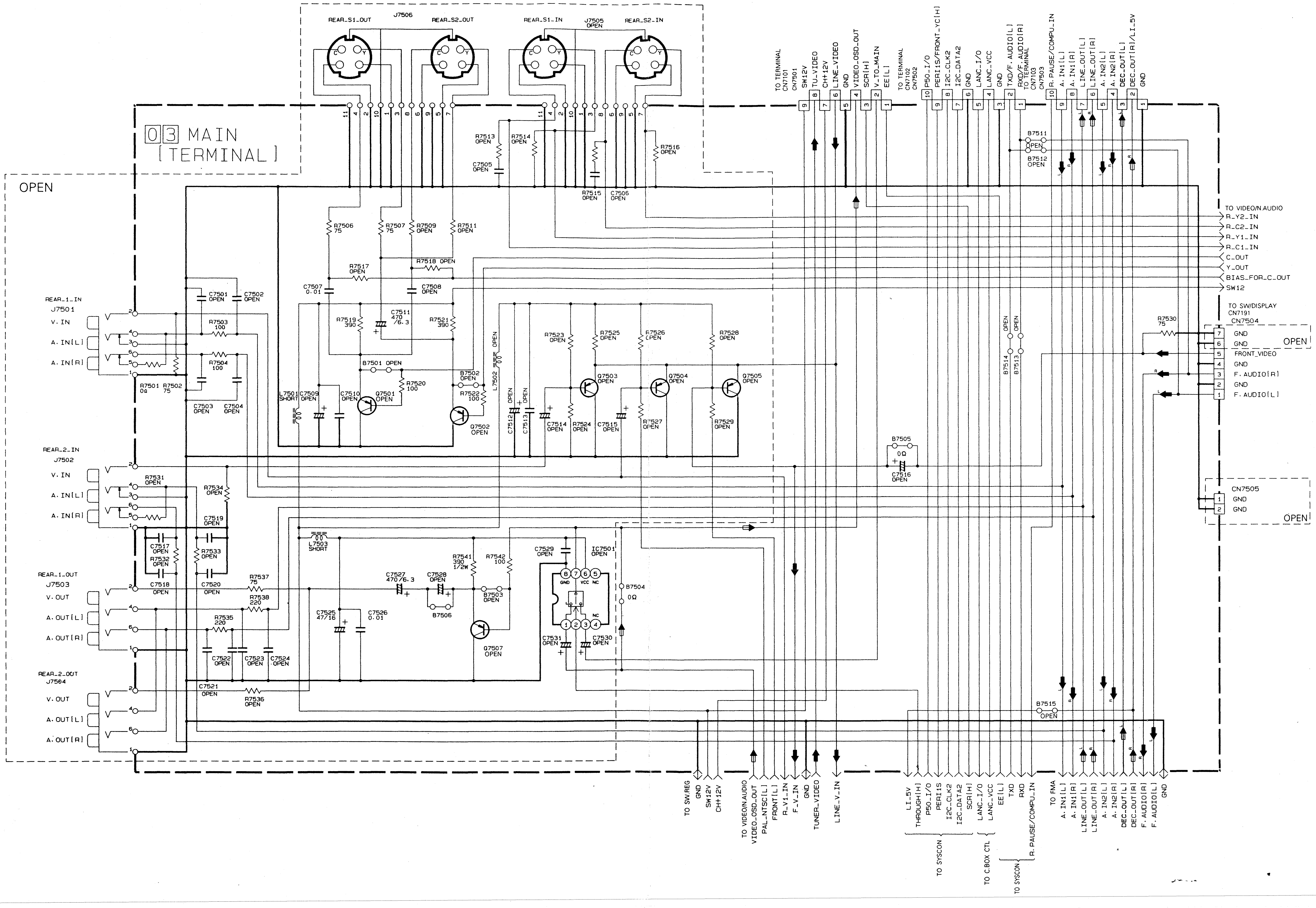
4.7 TUNER SCHEMATIC DIAGRAM


03 MAIN(TUNER)
TU6001
RF IN
RF OUT
PAL/MS
NTSC
ANT IN
ANT OUT
TO SW.REG
GND
RF5V
SW5V
SW12V
BT2
TO FMA
DEMOD(L)
GND
DEMOD(R)
RF_AUDIO
TO DEMOD CN6701
CN6701
US
JPN
KOREA
PHILIPS
OPEN
IC6080 BA15218F
Q6551
Q6501 DTC114TUA
Q6502 DTC114TUA
Q6030 2SB1218A/RS
Q6031 UN5211
Q6032 UN5211
Q6033 OPEN
Q6035 OPEN
CF6031 5.5MHz OPEN
S6050
B6001 0Ω
TO VIDEO/N.AUDIO
TU_VIDEO
VIDEO_OSD_OUT
GND
TU_AUDIO
TO SYSCON
LOCK(L)
TU_CE
TU_DATA
TU_CLK
I2C_CLK2
I2C_DATA2
BS_ANT/AFC
TU_A_MUTE(H)
TU_V_MUTE(H)
BIL_SEL
LED/RF_AGC
JUST_CLK
SW_1
SW_2

4.8 C.BOX CTL SCHEMATIC DIAGRAM


03 MAIN [C.BOX_CTL]
CN6103
10 I2C_CLK2
9 I2C_DATA2
8 BS_ANT/AFC
7 ANT_CTL[H]
6 BIT_IN[H]
5 GND
4 SW12V
3 AL6V
2 AL17V
1 BS_PCTL[H]
OPEN
TO SW.REG
SW12V
AL6V
AL17V
GND
C6101 OPEN
TO VIDEO/N.AUDIO
TU_VIDEO
GR_VIDEO
BS_VIDEO
GND
TO VIDEO/N.AUDIO
EE[L]
GND
S-P[H]/V.STB[L]
FORCE[L]
PS_SECAM[H]
SW12V
B7201 OPEN
B7204 OPEN
B7206 OPEN
B7207 OPEN
B7208 OPEN
B7205 OPEN
B7203 OPEN
B7202 OPEN
J6101
DET_OUT[M-N]
DET_IN
DET_OUT[W]·P50_I/O
R6101 75
B7211 OPEN
B6104
B6108
B6107
B6105
B6106
J6102
AFC_IN
BIT_IN
BIT_OUT
R6102 75
B6109
OPEN
B6103 OPEN
B6102 OPEN
B6101 OPEN
CN6101
17 BS_VIDEO
16 GND
15 BIT_IN
14 GND
13 DET_IN
12 GND
11 BIT_OUT
10 PS_SECAM[H]/GND
9 RCE[L]/DET_OUT[W]
8 SW12V/GND
7 SW12V/AFC_IN
6 S-P[H]/GND
5 GND/DET_OUT[M-N]
4 GND
3 GND/BS_AUDIO[R]
2 EE[L]/GND
1 NC/BS_AUDIO[L]
OPEN
TO FMA
BS_AUDIO[L]
BS_AUDIO[R]
GND
CN1901
1 GR_VIDEO
2 GND
3 TU_VIDEO
4 GND
5 I2C_DATA2
6 I2C_CLK2
7
8
9 GR_ON[H]/CNR_CTL
10 SW12V
11 AL6V
OPEN
TO SYSCON
GR_ON[H]/CNR_CTL
I2C_CLK2
I2C_DATA2
BS_ANT/AFC
ANT_CTL[H]
BIT_IN[H]
P50_I/O
BS_PCTL[H]
JLIP[L]
RXD
TXD
AL5V
RMD
R. PAUSE/COMPU_IN
GND
JLIP_IN
JLIP_OUT
NC
IC3961 OPEN
VCC
GND
B3961 OPEN
D3965 OPEN
R3954 OPEN
C3961 OPEN
IC3962 OPEN
D3961 OPEN
B3962 OPEN
R3961 OPEN
D3962 OPEN
D3964 OPEN
L7201 OPEN
Q7201 OPEN
R7202 OPEN
D3963 OPEN
C7202 OPEN
R7203 OPEN
R7204 OPEN
TO TERMINAL(MAIN)
LANC_VCC
LANC_I/O
R. PAUSE/COMPU/RAE
J3911
C3911 OPEN
95 LANC/C. BOX
J3952 LANC
J7201 C. BOX/DSS
R7211 100
CN7201
CN7202
CN7502
CN3951
94 JLIP
J3951 JLIP
B3951 OPEN
OPEN

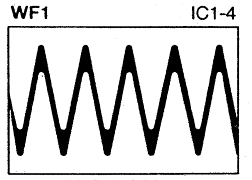
4.9 TERMINAL(MAIN) SCHEMATIC DIAGRAM



03 MAIN
[TERMINAL]
OPEN
J7506
REAR_S1_OUT
REAR_S2_OUT
REAR_S1_IN
J7505 OPEN
REAR_S2_IN
R7513 OPEN
R7514 OPEN
R7516 OPEN
C7505 OPEN
R7515 OPEN
C7506 OPEN
R7506 75
R7507 75
R7509 OPEN
R7511 OPEN
R7517 OPEN
R7518 OPEN
C7507 0.01
C7508 OPEN
C7501 OPEN
C7502 OPEN
C7511 470 /6.3
R7519 390
R7521 390
R7503 100
R7504 100
B7501 OPEN
R7520 100
B7502 OPEN
R7522 100
L7501 SHORT
C7509 OPEN
C7510 OPEN
Q7501 OPEN
Q7502 OPEN
L7502 OPEN
C7512 OPEN
C7513 OPEN
R7523 OPEN
R7525 OPEN
R7526 OPEN
R7528 OPEN
Q7503 OPEN
Q7504 OPEN
Q7505 OPEN
C7514 OPEN
R7524 OPEN
C7515 OPEN
R7527 OPEN
R7529 OPEN
REAR_1_IN
J7501
V. IN
A. IN[L]
A. IN[R]
R7501 0Ω
R7502 75
C7503 OPEN
C7504 OPEN
REAR_2_IN
J7502
V. IN
A. IN[L]
A. IN[R]
R7531 OPEN
R7534 OPEN
C7519 OPEN
C7517 OPEN
R7532 OPEN
R7533 OPEN
C7518 OPEN
C7520 OPEN
REAR_1_OUT
J7503
V. OUT
A. OUT[L]
A. OUT[R]
R7537 75
R7538 220
R7535 220
C7522 OPEN
C7523 OPEN
C7524 OPEN
REAR_2_OUT
J7504
V. OUT
A. OUT[L]
A. OUT[R]
C7521 OPEN
R7536 OPEN
L7503 SHORT
C7527 470/6.3
C7528 OPEN
B7506
R7541 390 1/2W
R7542 100
B7503 OPEN
C7525 47/16
C7526 0.01
Q7507 OPEN
C7529 OPEN
IC7501 OPEN
GND
VCC
NC
C7531 OPEN
C7530 OPEN
B7504 0Ω
B7505 0Ω
C7516 OPEN
TO TERMINAL CN7101
CN7501
SW12V
TU_VIDEO
CH+12V
LINE_VIDEO
GND
VIDEO_OSD_OUT
SCR[H]
V_TO_MAIN
EE[L]
TO TERMINAL CN7102
CN7502
P50_I/O
PERI1S/FRONT_YC[H]
I2C_CLK2
I2C_DATA2
GND
LANC_I/O
LANC_VCC
GND
TXD/F. AUDIO[L]
RXD/F. AUDIO[R]
TO TERMINAL CN7103
CN7503
R. PAUSE/COMPU_IN
A. IN1[L]
A. IN1[R]
LINE_OUT[L]
LINE_OUT[R]
A. IN2[L]
A. IN2[R]
DEC_OUT[L]
DEC_OUT[R]/LI_5V
GND
B7511
OPEN
B7512 OPEN
TO VIDEO/N.AUDIO
R_Y2_IN
R_C2_IN
R_Y1_IN
R_C1_IN
C_OUT
Y_OUT
BIAS_FOR_C_OUT
SW12
TO SW/DISPLAY CN7191
CN7504
R7530 75
B7514 OPEN
B7513 OPEN
GND
GND
FRONT_VIDEO
GND
F. AUDIO[R]
GND
F. AUDIO[L]
OPEN
CN7505
GND
GND
OPEN
B7515 OPEN
TO SW.REG
GND
SW12V
CH+12V
TO VIDEO/N.AUDIO
VIDEO_OSD_OUT
PAL_NTSC[L]
FRONT[L]
R_V1_IN
F_V_IN
GND
TUNER_VIDEO
LINE_V_IN
LI_5V
THROUGH[H]
P50_I/O
PERI1S
I2C_CLK2
I2C_DATA2
SCR[H]
TO SYSCON
LANC_I/O
LANC_VCC
TO C.BOX CTL
EE[L]
TXD
RXD
R. PAUSE/COMPU_IN
TO SYSCON
TO FMA
A. IN1[L]
A. IN1[R]
LINE_OUT[L]
LINE_OUT[R]
A. IN2[L]
A. IN2[R]
DEC_OUT[L]
DEC_OUT[R]
F. AUDIO[R]
F. AUDIO[L]
GND

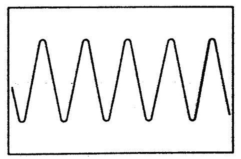
— VIDEO/N.AUDIO —

WF1 IC1-4



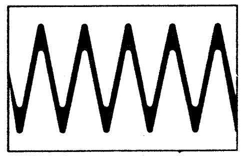
REC 0.8 Vp-p
20 mV/0.5 msec/DIV

WF2 IC1-9



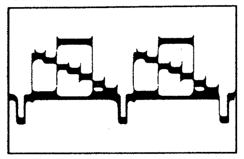
REC 0.1 Vp-p
2 mV/0.5 msec/DIV

WF3 IC1-11



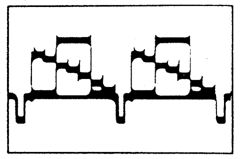
PB 0.48 Vp-p
10 mV/0.5 msec/DIV

WF4-1 IC1-19



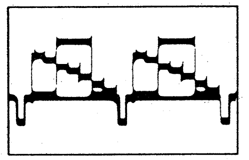
REC 0.51 Vp-p
20 mV/20 μsec/DIV

WF4-2 IC1-19



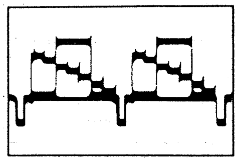
PB 0.55 Vp-p
20 mV/20 μsec/DIV

WF5-1 IC1-23



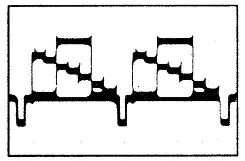
REC 0.48 Vp-p
20 mV/20 μsec/DIV

WF5-2 IC1-23



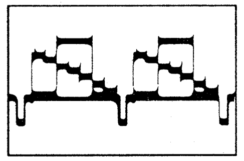
PB 0.52 Vp-p
20 mV/20 μsec/DIV

WF6-1 IC1-42



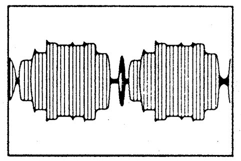
REC 0.4 Vp-p
10 mV/20 μsec/DIV

WF6-2 IC1-42



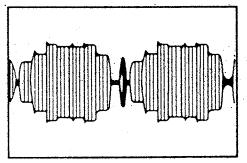
PB 0.43 Vp-p
10 mV/20 μsec/DIV

WF7-1 IC1-46



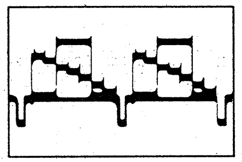
REC 0.24 Vp-p
10 mV/20 μsec/DIV

WF7-2 IC1-46



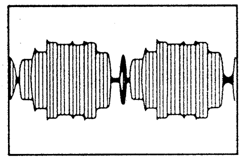
PB 0.3 Vp-p
10 mV/20 μsec/DIV

WF8 IC1-52



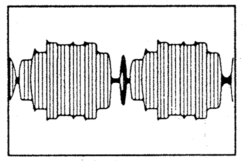
PB 2.2 Vp-p
50 mVV/20 μsec/DIV

WF9 IC1-55



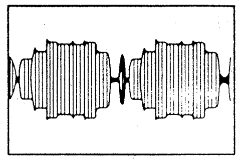
PB 0.6 Vp-p
20 mV/20 μsec/DIV

WF10-1 IC1-58



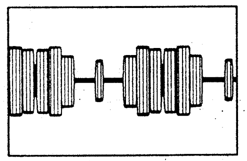
REC 0.4 Vp-p
10 mV/20 μsec/DIV

WF10-2 IC1-58



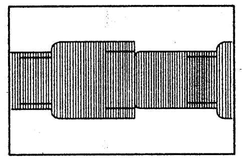
PB 0.48 Vp-p
10 mV/20 μsec/DIV

WF11-1 IC1-78



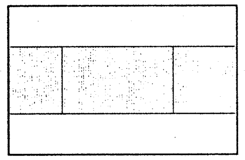
REC 0.62 Vp-p
20 mV/20 μsec/DIV

WF11-2 IC1-78



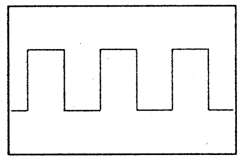
PB 0.22 Vp-p
10 mV/5 msec/DIV

WF12 IC1-87



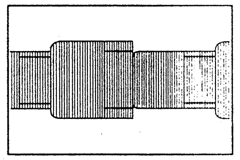
REC 1.6 Vp-p
50 mV/1 msec/DIV

WF13 TP111 D.FF



REC/PB 5.2 Vp-p
0.2 V/10 msec/DIV

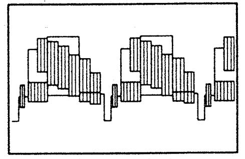
WF14 TP106 V.PB FM



PB 0.32 Vp-p
10 mV/5 msec/DIV

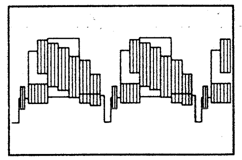
— ON SCREEN —

WF1 IC201-21 CV_IN



REC/PB 2.2 Vp-p
50 mV/20 μsec/DIV

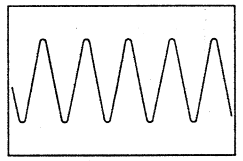
WF2 IC201-19 CVOUT



REC/PB 2.2 Vp-p
50 mV/20 μsec/DIV

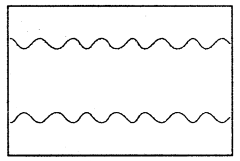
— FMA —

WF1 IC2201-9



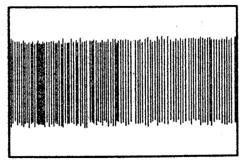
REC 0.11 Vp-p
2 mV/0.5 msec/DIV

WF2 IC2201-21



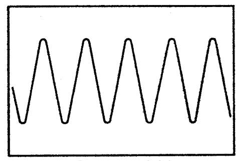
REC 0.48 Vp-p
10 mV/1 msec/DIV

WF3 IC2201-30



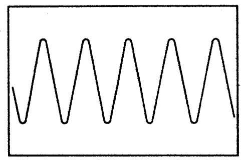
PB 0.56 Vp-p
20 mV/5 msec/DIV

WF4 IC2201-53



REC/PB 1.2 Vp-p
20 mV/0.5 msec/DIV

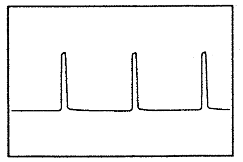
WF5 IC2201-61



REC 0.12 Vp-p
2 mV/0.5 msec/DIV

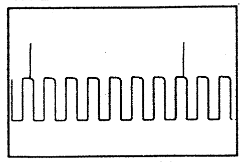
— SYSCON —

WF1 CN3001-4 D.PG



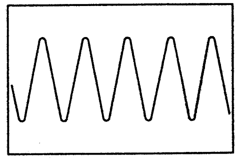
REC/PB 4.8 Vp-p
0.2 V/10 msec/DIV

WF2 CN3001-5 D.FG



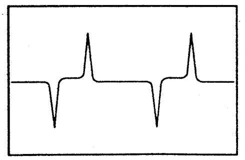
REC/PB 4.5 Vp-p
0.1 V/5 msec/DIV

WF3 CN3003-2 CAP_FG



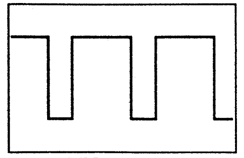
REC/PB 2.2 Vp-p
50 mV/0.5 msec/DIV

WF4 TP4001 CTL P



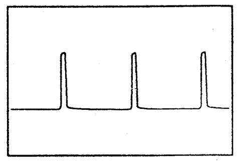
PB 2.5 Vp-p
50 mV/10 msec/DIV

WF5 IC3001-1 CTL(+)



REC 4.0 Vp-p
0.1 V/10 msec/DIV

WF6 IC3001-98 C.SYNC



REC/PB 4.1 Vp-p
0.1 V/20 μsec/DIV

COMPONENT PARTS LOCATION GUIDE <MAIN>

REF.NO.	LOCATION		
CAPACITOR			
C1	A	D	11L
C3	B	C	13L
C5	B	C	14L
C6	B	C	14K
C7	A	D	13L
C9	B	C	14L
C11	B	C	14L
C12	B	C	13K
C13	A	D	13K
C14	B	C	13K
C15	B	C	13K
C16	B	C	14K
C17	B	C	17G
C18	B	C	17G
C19	B	C	16H
C20	A	D	14J
C21	B	C	14J
C22	B	C	15J
C23	B	C	13J
C24	B	C	14J
C25	B	C	14J
C26	B	C	14J
C27	B	C	15J
C29	A	D	14I
C30	A	D	13I
C31	B	C	13I
C32	B	C	12H
C34	A	D	12I
C36	B	C	13J
C37	A	D	13I
C38	B	C	11H
C39	B	C	12G
C40	B	C	12H
C41	B	C	12I
C42	B	C	10H
C43	B	C	11H
C44	B	C	10H
C45	B	C	10H
C46	B	C	10H
C47	B	C	11J
C48	A	D	11I
C49	B	C	9H
C50	B	C	9H
C51	B	C	10M
C52	B	C	10N
C53	B	C	11N
C54	A	D	11J
C55	A	D	10J
C56	A	D	10K
C57	B	C	10K
C58	B	C	10J
C59	B	C	10J
C60	B	C	9K
C61	B	C	8J
C62	B	C	9K
C63	B	C	10K
C64	A	D	8K
C65	B	C	10K
C73	B	C	12H
C74	B	C	12G
C76	B	C	17G
C77	B	C	17G
C78	B	C	18G
C79	B	C	17G
C80	B	C	16G
C81	B	C	13K
C82	B	C	13L
C83	B	C	13L
C84	B	C	13L
C85	B	C	16G
C86	A	D	17H
C87	B	C	16G
C88	B	C	15G
C89	B	C	16G
C90	B	C	16G
C91	B	C	10I
C92	B	C	9K
C95	B	C	14K
C98	B	C	9K
C99	B	C	9J
C101	B	C	9K
C102	B	C	19I
C104	B	C	11I
C105	B	C	12N
C107	B	C	13I
C115	B	C	12H
C120	B	C	17H
C129	B	C	16J
C130	B	C	16I
C131	B	C	15J
C134	B	C	11J
C136	B	C	13K
C141	B	C	12I
C145	B	C	10G
C146	B	C	15G
C147	B	C	15H
C148	B	C	15H
C150	A	D	18G
C153	B	C	13G
C154	B	C	9J
C158	B	C	14J
C164	B	C	14K
C165	B	C	14K
C168	B	C	11L
C169	B	C	9H
C171	B	C	11H
C175	B	C	9J
C176	B	C	18H
C177	B	C	13N
C178	B	C	11H
C181	B	C	12H
C182	B	C	9I
C183	B	C	9I
C191	B	C	15G
C193	B	C	9J
C201	A	D	7N
C202	B	C	8M
C203	B	C	8L
C204	B	C	8L
C205	B	C	8L
C206	B	C	7M
C207	B	C	7M
C208	B	C	6L
C209	B	C	7M
C210	B	C	6M
C211	B	C	6M
C212	B	C	6L
C213	A	D	6L
C214	B	C	6M
C215	B	C	6M
C216	A	D	6M
C217	B	C	7N
C218	B	C	7N
C219	B	C	7N
C220	B	C	7M
C222	B	C	8M
C223	B	C	6N
C224	B	C	6N
C401	B	C	18I
C402	B	C	18I
C403	B	C	17I
C404	B	C	17I
C405	B	C	17I
C406	B	C	17I
C407	B	C	16J
C408	B	C	16J
C409	B	C	16J
C2001	B	C	14M
C2002	A	D	14L
C2003	B	C	12L
C2004	A	D	12L
C2005	B	C	11L
C2006	B	C	12L
C2007	A	D	12L
C2008	B	C	11L
C2009	A	D	11L
C2010	A	D	15M
C2011	B	C	12M
C2013	B	C	13M
C2015	A	D	15M
C2016	A	D	15N
C2017	B	C	11L
C2051	B	C	7I
C2052	A	D	7I
C2053	B	C	6J
C2054	B	C	6J
C2055	A	D	6J
C2061	A	D	20G
C2062	B	C	20F
C2063	B	C	20F
C2064	A	D	20F
C2101	A	D	18N
C2102	A	D	13L
C2151	B	C	17J
C2152	B	C	18J
C2201	A	D	17M
C2202	A	D	17N
C2203	A	D	17N
C2204	A	D	17N
C2205	A	D	16M
C2206	A	D	16M
C2207	A	D	16N
C2208	A	D	16L
C2209	A	D	16L
C2210	A	D	17J
C2211	A	D	18K
C2212	A	D	18J
C2213	A	D	18K
C2214	B	C	18L
C2215	A	D	18L
C2216	A	D	18L
C2217	A	D	19L
C2218	A	D	19M
C2219	A	D	18M
C2220	A	D	18M
C2221	A	D	19N
C2222	A	D	18N
C2223	B	C	18N
C2224	B	C	17M
C2225	A	D	18N
C2226	A	D	18N
C2227	A	D	18N
C2228	A	D	19M
C2229	A	D	19M
C2230	B	C	16M
C2231	B	C	16L
C2232	A	D	17K
C2233	B	C	17K
C2234	B	C	17K
C2251	B	C	16L
C2252	B	C	16K
C2253	B	C	16K
C2254	B	C	16K
C2255	B	C	16K
C2256	B	C	19L
C2257	A	D	16K
C2258	B	C	16K
C2259	B	C	16K
C2260	B	C	17J
C2261	B	C	16K
C2262	B	C	15K
C2263	B	C	16K
C2501	A	D	20B
C2502	B	C	21C
C2503	A	D	20C
C2504	B	C	20C
C2505	A	D	20B
C2506	B	C	19D
C2507	B	C	20D
C2508	B	C	19D
C2509	B	C	19D
C2510	A	D	20C
C2511	B	C	20B
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C2515	B	C	20D
C2517	B	C	21C
C2518	B	C	18B
C2519	B	C	18C
C2520	B	C	20B
C2521	A	D	20B
C3001	B	C	8J
C3002	B	C	8H
C3003	A	D	7H
C3004	B	C	7H
C3007	B	C	5E
C3008	B	C	21E
C3010	A	D	1B
C3011	A	D	1B
C3012	A	D	4B
C3013	B	C	5B
C3014	B	C	9E
C3016	B	C	9C
C3017	B	C	8B
C3018	B	C	8B
C3019	B	C	9B
C3020	B	C	9B
C3021	B	C	9B
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C3038	B	C	12D
C3039	B	C	12D
C3040	B	C	8C
C3041	B	C	11C
C3042	A	D	4A
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C3053	A	D	6B
C3054	B	C	12C
C3301	B	C	14C
C3302	B	C	15C
C3303	B	C	16C
C3304	B	C	16B
C3501	B	C	15A
C3502	A	D	15A
C3503	B	C	14F
C3504	B	C	14F
C3505	B	C	14F
C3911	B	C	17P
C3961	B	C	16A
C4001	B	C	9E
C4002	B	C	10E
C4003	B	C	9F
C4004	B	C	10F
C4005	B	C	9F
C4006	B	C	9F
C4007	B	C	10F
C4008	B	C	9E
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C4012	B	C	11G
C4013	B	C	11F
C4014	B	C	11F
C4015	B	C	10F
C5001	A	D	2O
C5002	A	D	3N
C5003	A	D	4P
C5004	A	D	1M
C5005	A	D	1L
C5006	A	D	3M
C5101	A	D	3K
C5102	A	D	3J
C5103	B	C	2K
C5104	A	D	3L
C5105	A	D	1K
C5106	A	D	4L
C5107	A	D	2K
C5108	A	D	3N
C5109	A	D	2N
C5110	A	D	2K
C5201	A	D	1F
C5202	A	D	2G
C5203	A	D	1G
C5204	A	D	4H
C5205	A	D	1F
C5206	A	D	3G
C5207	A	D	3F
C5208	A	D	1E
C5209	A	D	6P
C5210	A	D	3H
C5301	A	D	2D
C5302	A	D	2D
C5303	A	D	3E
C5304	A	D	4D
C5305	B	C	1F
C5306	A	D	3C
C5307	A	D	2D
C5308	A	D	4F
C5309	A	D	4F
C5310	A	D	2C
C5311	A	D	5M
C5312	A	D	3C
C6005	A	D	20M
C6006	B	C	21M
C6007	A	D	21M
C6008	B	C	21M
C6012	A	D	21O
C6013	B	C	21O
C6014	B	C	21P
C6016	B	C	21O
C6020	B	C	22M
C6021	B	C	22M
C6022	B	C	21N
C6023	B	C	22M
C6024	B	C	22K
C6032	B	C	21G
C6033	B	C	22J
C6036	B	C	22H
C6037	A	D	21G
C6052	B	C	21O
C6053	B	C	21P
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C6519	B	C	21G
C6520	B	C	21G
C6551	A	D	21H
C6552	B	C	21H
C6553	A	D	22H
C6554	B	C	22G
C7202	A	D	16P
C7501	B	C	12O
C7502	B	C	12O
C7503	B	C	13O
C7504	B	C	13O
C7505	B	C	7P
C7506	B	C	7O
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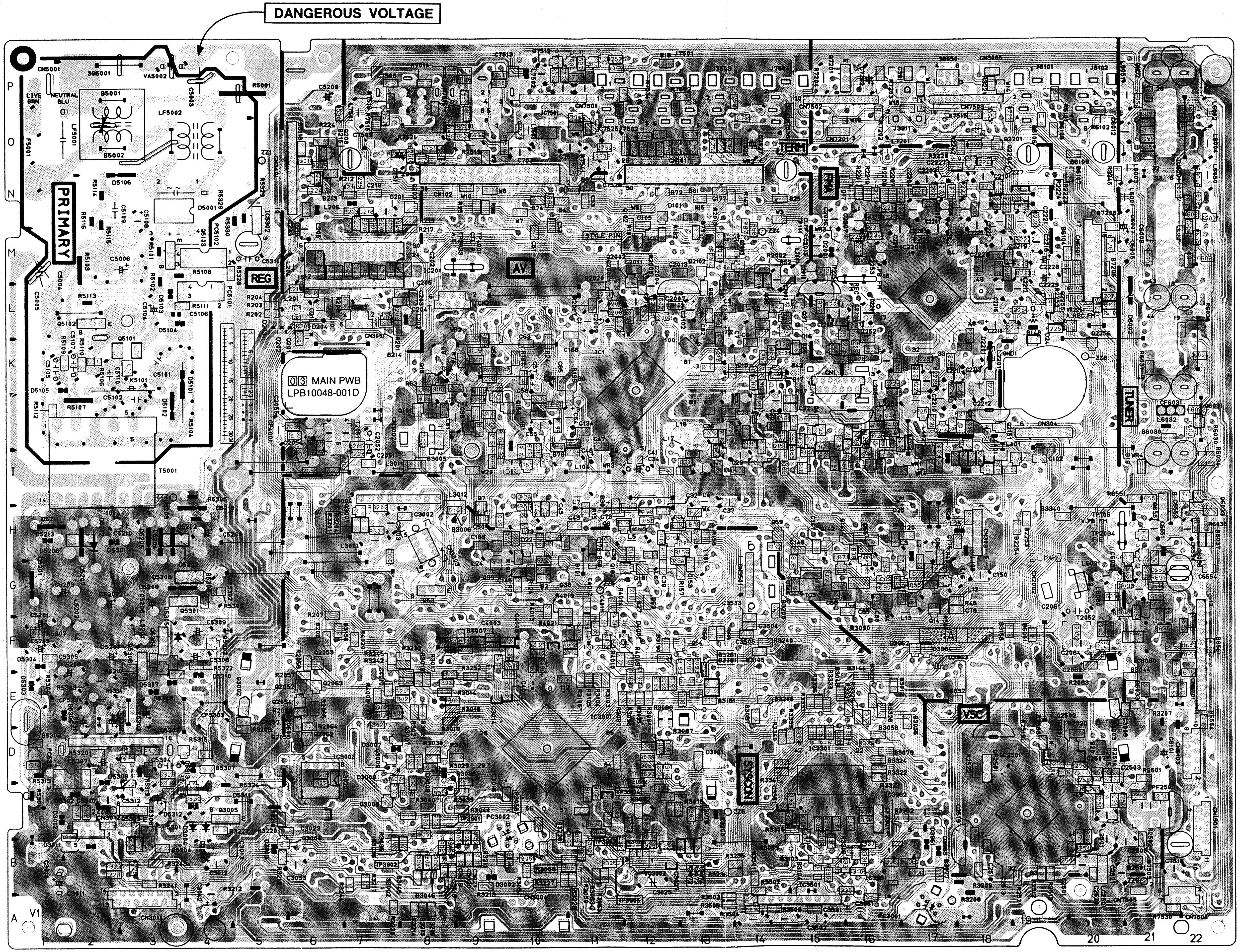
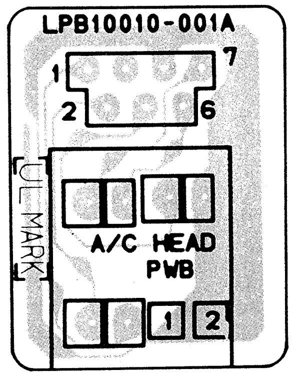
C7508	B	C	9O
C7509	A	D	7O
C7510	B	C	8O
C7511	A	D	8O
C7512	A	D	10P
C7513	B	C	10P
C7514	A	D	11P
C7515	A	D	11P
C7516	A	D	21B
C7517	B	C	12O
C7518	B	C	12O
C7519	B	C	12O
C7520	B	C	12O
C7521	B	C	14O
C7522	B	C	14O
C7523	B	C	13O
C7524	B	C	13O
C7525	A	D	11O
C7526	B	C	11O
C7527	A	D	14O
C7528	A	D	11O
C7529	B	C	10O
C7530	A	D	11O
C7531	A	D	10O
CONNECTOR			
CN1	A	D	15K
CN101	A	D	14O
CN102	A	D	10O
CN303	A	D	18H
CN304	A	D	20J
CN1901	A	D	22C
CN2001	A	D	9L
CN2002	A	D	20G
CN3001	A	D	7L
CN3002	A	D	8J
CN3003	A	D	8H
CN3004	A	D	10A
CN3005	A	D	18P
CN3011	A	D	3A
CN3012	A	D	2C
CN3401	A	D	6O
CN3501	A	D	14H
CN5001	A	D	1P
CN6101	A	D	20L
CN6103	A	D	22D
CN6701	A	D	22E
CN7201	A	D	15O
CN7501	A	D	11P
CN7502	A	D	16P
CN7503	A	D	18P
CN7504	A	D	22A
CN7505	A	D	21B
DIODE			
D16	B	C	15K
D17	B	C	16N
D22	B	C	10H
D24	B	C	19K
D25	B	C	16I
D101	B	C	12N
D201	B	C	6L
D202	B	C	5L
D203	B	C	5L
D204	B	C	6L
D2001	A	D	15M
D2201	A	D	18K
D2501	B	C	19D
D3001	A	D	13D
D3002	A	D	9B
D3003	A	D	5B
D3004	A	D	4C
D3005	A	D	4C
D3006	B	C	18P
D3007	A	D	8D
D3008	B	C	7D
D3009	A	D	8D
D3011	A	D	2B
D3012	A	D	1C
D3961	A	D	17C
D3962	B	C	17F
D3963	B	C	17F
D3964	B	C	17F
D3965	A	D	17B
D4001	B	C	12F
D4002	B	C	11F
D5001	B	C	3N
D5101	A	D	4J
D5102	A	D	3K
D5103	A	D	3L
D5104	A	D	3L
D5105	A	D	2K
D5106	A	D	3N
D5201	A	D	1G
D5202	A	D	4H
D5203	A	D	3H
D5204	A	D	3H
D5205	A	D	3H
D5206	A	D	2H
D5207	A	D	2H
D5208	A	D	4G
D5209	A	D	4G
D5210	A	D	3H
D5211	A	D	1H
D5212	A	D	2H
D5213	A	D	1H
D5301	A	D	2H
D5302	A	D	2C
D5303	A	D	1E
D5304	A	D	1F
D5305	A	D	4F
D5306	A	D	2E
D5307	A	D	3E
D5308	A	D	3E
D5309	A	D	2D
D5310	A	D	4E
D5311	A	D	4C
D5312	B	C	3C
D5313	A	D	4D
D6002	A	D	21M
D6551	A	D	21G
IC			
IC1	B	C	12K
IC2	B	C	16G
IC3	B	C	15G
IC201	A	D	8L
IC2201	B	C	17L
IC2501	B	C	19C
IC3001	B	C	10D
IC3002	B	C	12B
IC3003	A	D	6C
IC3004	A	D	8I
IC3301	B	C	15D
IC3501	A	D	15A
IC3961	B	C	16B
IC3962	B	C	16B
IC5301	A	D	2D
IC5302	A	D	5N
IC6080	B	C	21F
IC7501	B	C	10O
JACK			
J3911	A	D	17P
J6101	A	D	19P
J6102	A	D	20P
J7501	A	D	12P
J7502	A	D	11P
J7503	A	D	13P
J7504	A	D	14P
J7505	A	D	8P
J7506	A	D	9P
COIL			
L1	A	D	14L
L2	A	D	17G
L3	A	D	16H
L4	A	D	13I
L5	A	D	12H
L6	A	D	12G
L7	A	D	11I
L8	A	D	9J
L9	A	D	8K
L12	A	D	17G
L13	A	D	17G
L14	A	D	9J
L16	A	D	18G
L17	A	D	13J
L18	A	D	13J
L23	A	D	10H
L24	A	D	9H
L25	A	D	18H
L104	A	D	11I
L108	A	D	18G
L151	A	D	13G
L181	A	D	10I
L201	A	D	6L
L202	A	D	8L
L203	A	D	7L
L204	A	D	6M
L205	A	D	6N
L206	A	D	7N
L401	A	D	18I
L402	A	D	17I
L2001	A	D	15L
L2201	A	D	18K
L2251	A	D	16K
L2252	A	D	17J
L2501	A	D	20C
L3001	A	D	7H
L3011	B	C	8I
L3012	B	C	8H
L3501	A	D	14A
L5201	A	D	3F
L5202	A	D	2F
L5301	A	D	4C
L6001	A	D	21N
L6002	A	D	22P
L6003	A	D	21O
L6004	A	D	22O
L6031	A	D	20G
L6032	A	D	21J
L6050	A	D	22O
L6051	A	D	21P
L6080	A	D	20G
L7201	A	D	16O
L7501	A	D	7P
L7502	A	D	10P
L7503	A	D	10O
TRANSISTOR			
Q1	B	C	15J
Q2	B	C	14I
Q3	B	C	15J
Q4	B	C	15J
Q6	B	C	12H
Q7	B	C	9H
Q13	B	C	17G
Q14	B	C	17G
Q15	B	C	17G
Q16	B	C	15G
Q17	B	C	16G
Q18	B	C	8K
Q21	B	C	9J
Q34	B	C	14L
Q35	B	C	14L
Q36	B	C	14L
Q37	B	C	15L
Q38	B	C	10G
Q39	B	C	9G
Q45	B	C	14J
Q46	B	C	15I
Q47	B	C	14J
Q48	B	C	14I
Q49	B	C	13I
Q52	B	C	9H
Q53	A	D	8G
Q54	B	C	13F
Q55	B	C	16H
Q56	B	C	10I
Q57	B	C	9J
Q58	B	C	9K
Q59	B	C	14H
Q101	B	C	8J
Q102	B	C	12M
Q103	B	C	16I
Q104	B	C	16I
Q141	B	C	16H
Q142	B	C	15H
Q152	B	C	14K
Q153	B	C	12H
Q154	B	C	13H
Q157	B	C	10I
Q158	B	C	9J
Q159	B	C	9J
Q160	B	C	16I
Q161	B	C	12H
Q181	B	C	12G
Q182	B	C	12G
Q203	B	C	8N
Q204	B	C	7L
Q207	B	C	6N
Q208	B	C	6O
Q211	B	C	7N
Q401	B	C	18I
Q402	B	C	19I
Q403	B	C	18J
Q404	B	C	17I
Q405	B	C	16J
Q2001	B	C	11L
Q2002	B	C	12M
Q2003	B	C	14M
Q2051	B	C	6I
Q2052	B	C	6E
Q2053	B	C	6F
Q2054	B	C	6E
Q2055	B	C	6D
Q2061	B	C	20F
Q2062	B	C	6D
Q2063	B	C	6E
Q2102	B	C	13M
Q2103	B	C	14M
Q2151	B	C	18J
Q2152	B	C	17J
Q2201	B	C	18O
Q2202	B	C	18O
Q2203	B	C	18O
Q2204	B	C	18O
Q2251	B	C	15K
Q2252	B	C	16L
Q2253	B	C	17J
Q2254	B	C	19L
Q2255	B	C	19L
Q2256	B	C	20K
Q2257	B	C	20L
Q2258	B	C	19L
Q2501	B	C	20D
Q2502	B	C	20D
Q3001	B	C	7H
Q3002	A	D	5E
Q3003	A	D	20E
Q3004	B	C	5B
Q3005	A	D	5C
Q3007	B	C	7D
Q3008	B	C	7C
Q3009	B	C	7D
Q3501	B	C	14A
Q4001	B	C	7E
Q5101	A	D	2K
Q5102	A	D	2L
Q5103	A	D	3M
Q5301	A	D	3G
Q5302	B	C	4F
Q5303	A	D	3C
Q5304	A	D	3F
Q5305	B	C	3F
Q5306	A	D	3F
Q5307	B	C	4D
Q5308	B	C	3C
Q5310	B	C	4C
Q5311	B	C	3B
Q5312	B	C	1D
Q6030	B	C	22J
Q6031	B	C	22J
Q6032	B	C	21G
Q6033	B	C	22I
Q6035	B	C	22I
Q6501	B	C	21H
Q6502	B	C	21H
Q6551	A	D	21H
Q7201	A	D	16P
Q7501	B	C	8P
Q7502	B	C	8O
Q7503	B	C	11P
Q7504	B	C	11P
Q7505	B	C	10P
Q7507	B	C	11O
RESISTOR			
R1	B	C	16H
R2	B	C	14K
R3	B	C	13J
R4	B	C	15J
R5	B	C	15I
R6	B	C	15J
R7	B	C	13I
R10	B	C	12H
R11	B	C	12H
R13	B	C	10H
R15	B	C	11H
R16	B	C	10H
R20	B	C	10J
R23	B	C	8J
R24	B	C	10K
R25	B	C	9K
R46	B	C	17G
R47	B	C	17G
R48	B	C	18G
R49	B	C	17H
R50	B	C	17G
R52	B	C	14M
R54	B	C	17G
R55	B	C	17G
R56	B	C	10H
R57	B	C	15J
R59	B	C	12H
R60	B	C	9H
R61	B	C	10H
R62	B	C	9K
R63	B	C	8K
R64	B	C	8K
R68	B	C	13F
R69	B	C	13F
R71	B	C	15H
R73	B	C	10G
R74	B	C	9K
R75	B	C	9J
R76	B	C	10I
R94	B	C	16G
R95	B	C	9N
R96	B	C	9N
R97	B	C	14N
R98	B	C	14M
R99	B	C	9F
R101	B	C	8J
R112	B	C	14K
R116	B	C	14J
R120	B	C	14K
R121	B	C	14K
R123	B	C	10H
R124	B	C	10G
R126	B	C	16J
R127	B	C	16I
R128	B	C	16J
R129	B	C	16J
R130	B	C	16J
R137	B	C	14J
R139	B	C	15J
R140	B	C	15I
R141	B	C	15G
R142	B	C	14H
R143	B	C	13N
R150	B	C	12H
R151	B	C	15I
R156	B	C	13H
R157	B	C	13G
R158	B	C	13H
R159	B	C	13H
R161	B	C	10I
R162	B	C	10I
R163	B	C	9I
R164	B	C	9J
R165	B	C	9K
R166	B	C	9K
R168	B	C	14J
R169	B	C	14I
R170	B	C	13J
R171	B	C	13I
R172	B	C	16I
R178	B	C	13J
R179	B	C	14I
R181	B	C	12M
R182	B	C	12M
R189	B	C	15I
R190	B	C	10G
R191	B	C	10H
R194	B	C	10G
R195	B	C	11J
R196	B	C	10J
R197	B	C	10K
R198	B	C	9K
R199	B	C	9L
R201	B	C	7L
R202	B	C	5L
R203	B	C	5L
R204	B	C	5L
R205	B	C	6L
R206	B	C	7L
R207	B	C	6G
R208	B	C	7L
R209	B	C	6L
R210	B	C	6L
R211	B	C	6M
R212	B	C	6N
R213	B	C	7N
R215	B	C	7M
R216	B	C	7M
R217	B	C	8M
R218	B	C	6N
R219	B	C	8N
R220	B	C	7N
R223	B	C	7N
R224	B	C	6O
R225	B	C	6O
R235	B	C	7N
R401	B	C	18I
R402	B	C	18I
R403	B	C	18I
R404	B	C	18I
R405	B	C	17I
R408	B	C	17J
R409	B	C	17J
R410	B	C	16J
R2001	B	C	14M
R2002	B	C	14M
R2003	B	C	12L
R2004	B	C	12L
R2005	B	C	12L
R2006	B	C	11L
R2007	B	C	11L
R2009	B	C	13M
R2010	B	C	13M
R2013	B	C	13M
R2014	B	C	13M
R2018	B	C	13L
R2019	B	C	13M
R2020	B	C	11L
R2051	B	C	7I
R2052	B	C	7I
R2053	B	C	7J
R2054	B	C	6J
R2055	B	C	6I
R2056	B	C	6J
R2057	B	C	6E
R2058	B	C	6F
R2059	B	C	6E
R2060	B	C	6E
R2061	B	C	20F
R2062	B	C	20F
R2063	A	D	20E
R2064	B	C	6E
R2065	B	C	6E
R2105	B	C	12L
R2106	B	C	14L
R2107	B	C	14M
R2108	B	C	15M
R2151	B	C	18J
R2152	B	C	18J
R2201	B	C	17N
R2202	B	C	17N
R2203	B	C	17M
R2204	B	C	17N
R2205	B	C	17N
R2206	B	C	17N
R2207	B	C	16N
R2208	B	C	16N
R2209	B	C	16N
R2210	B	C	16N
R2211	B	C	16N
R2212	B	C	17N
R2213	B	C	16N
R2214	B	C	16N
R2215	B	C	16M
R2216	B	C	16N
R2217	B	C	16N
R2218	B	C	18K
R2219	B	C	19N
R2220	B	C	18M
R2221	B	C	18N
R2222	B	C	19M
R2223	B	C	19N
R2224	B	C	19N
R2225	B	C	18N
R2226	B	C	18N
R2227	B	C	17M
R2228	B	C	18N
R2229	B	C	18O
R2230	B	C	18N
R2231	B	C	17N
R2232	B	C	19M
R2233	B	C	19M
R2234	B	C	18M
R2235	B	C	18M
R2236	B	C	16M
R2237	B	C	16M
R2238	B	C	17K
R2239	B	C	18K
R2240	B	C	17K
R2241	B	C	18O
R2242	B	C	18O
R2243	B	C	18O
R2244	B	C	18K
R2251	B	C	18K
R2252	B	C	17K
R2253	B	C	19L
R2254	B	C	17K
R2255	B	C	19L
R2501	B	C	21D
R2502	B	C	21B
R2503	B	C	20C
R2504	B	C	20C
R2505	B	C	20C
R2506	B	C	20C
R2507	B	C	20D
R2508	B	C	19D
R2509	B	C	19B
R2510	B	C	20B
R2511	B	C	20B
R2512	B	C	19B
R2513	B	C	19B
R2514	B	C	20D
R2515	B	C	20C
R2519	B	C	19D
R2520	B	C	20D
R2521	B	C	19B
R2522	B	C	18D
R3011	B	C	9F
R3012	B	C	8E
R3013	B	C	8E
R3014	B	C	8E
R3015	B	C	8E
R3016	B	C	8E
R3017	B	C	8E
R3018	B	C	8E
R3019	B	C	8E
R3020	B	C	8E
R3021	B	C	8E
R3022	B	C	8E
R3025	B	C	7E
R3026	B	C	7E
R3027	B	C	7E
R3029	B	C	9D
R3030	B	C	8D
R3031	B	C	8D
R3033	B	C	8C
R3034	B	C	8C
R3035	B	C	7B
R3036	B	C	8B
R3037	B	C	8C
R3038	B	C	9D
R3039	B	C	9C
R3040	B	C	8C
R3041	B	C	8C
R3042	B	C	8C
R3044	B	C	9C
R3046	B	C	8B
R3047	B	C	8B
R3048	B	C	8B
R3049	B	C	8B
R3050	B	C	8B
R3051	B	C	9C
R3052	B	C	9C
R3053	B	C	9C
R3054	B	C	10B
R3055	B	C	10B
R3056	B	C	10C
R3057	B	C	11B
R3058	B	C	11B
R3059	B	C	11B
R3060	B	C	11B
R3061	B	C	11B
R3062	B	C	11B
R3063	B	C	11B
R3066	B	C	12B
R3069	B	C	11C
R3071	B	C	11C
R3072	B	C	13B
R3073	B	C	13B
R3074	B	C	13B
R3075	B	C	12C
R3076	B	C	12C
R3077	B	C	13C
R3078	B	C	12C
R3079	B	C	13C
R3080	B	C	12D
R3081	B	C	12D
R3083	B	C	12D
R3085	B	C	12D
R3086	B	C	12D
R3087	B	C	12E
R3088	B	C	12E
R3089	B	C	13E
R3090	B	C	12F
R3091	B	C	12E
R3092	B	C	12E
R3093	B	C	12E
R3094	B	C	12E
R3095	B	C	12E
R3096	B	C	12E
R3097	B	C	11E
R3103	B	C	11E
R3104	B	C	11E
R3105	B	C	11E
R3106	B	C	11E
R3201	B	C	7H
R3202	B	C	7H
R3203	B	C	7H
R3204	B	C	7H
R3205	A	D	13C
R3206	B	C	5D
R3207	B	C	21E
R3208	A	D	18A
R3209	A	D	18B
R3210	B	C	9B
R3211	B	C	9B
R3212	A	D	5B
R3213	B	C	9B
R3214	B	C	8A
R3215	B	C	8A
R3216	B	C	8A
R3217	B	C	7B
R3218	B	C	5C
R3219	B	C	5B
R3220	B	C	5C
R3221	B	C	18P
R3222	B	C	4C
R3223	B	C	6D
R3224	B	C	6C
R3225	B	C	7A
R3226	B	C	10B
R3227	B	C	10B
R3228	B	C	11B
R3229	B	C	11C
R3230	B	C	12B
R3231	B	C	12B
R3232	B	C	8F
R3233	B	C	8D
R3234	B	C	8D
R3235	B	C	14B
R3236	B	C	14B
R3237	B	C	2B
R3238	B	C	2C
R3239	B	C	2B
R3240	B	C	14F
R3241	B	C	3B
R3242	B	C	8E
R3243	B	C	3B
R3244	B	C	7B
R3245	B	C	8F
R3246	B	C	8E
R3247	B	C	8E
R3251	B	C	3B
R3252	B	C	9E
R3304	B	C	14C
R3305	B	C	15C
R3306	B	C	15C
R3307	B	C	15B
R3308	B	C	15C
R3309	B	C	15B
R3310	B	C	15C
R3311	B	C	15B
R3312	B	C	15C
R3313	B	C	15B
R3314	B	C	16B
R3316	B	C	16B
R3317	B	C	16C
R3318	B	C	16B
R3319	B	C	16C
R3322	B	C	16D
R3323	B	C	16D
R3324	B	C	16D
R3325	B	C	16D
R3326	B	C	16E
R3327	B	C	16E
R3328	B	C	16E
R3329	B	C	16D
R3330	B	C	15D
R3331	B	C	16E
R3332	B	C	15D
R3333	B	C	15E
R3334	B	C	15D
R3335	B	C	15D
R3336	B	C	15E
R3337	B	C	15E
R3338	B	C	15D
R3339	B	C	15D
R3340	B	C	14D
R3341	B	C	14D
R3342	B	C	14D
R3345	B	C	20N
R3346	B	C	22N
R3353	B	C	15B
R3354	B	C	16B
R3501	B	C	14B
R3502	B	C	14B
R3503	B	C	13A
R3504	B	C	14A
R3505	B	C	13A
R3506	B	C	14A
R3961	B	C	16B
R3962	B	C	17C
R4001	B	C	11F
R4002	B	C	10F
R4003	B	C	10F
R4004	B	C	10F
R4005	B	C	9F
R4006	B	C	9F
R4007	B	C	9F
R4008	B	C	7E
R4009	B	C	12F
R4010	B	C	11F
R4011	B	C	11F
R4012	B	C	11F
R4013	B	C	10G
R4014	B	C	11G
R4015	B	C	11F
R4016	B	C	11F
R4017	B	C	11F
R4018	B	C	11F
R4019	B	C	10G
R4020	B	C	7F
R4021	B	C	10F
R5001	A	D	5P
R5101	A	D	3M
R5102	A	D	3L
R5103	A	D	2M
R5104	A	D	4J
R5105	A	D	3K
R5106	A	D	2K
R5107	A	D	2J
R5108	A	D	4M
R5109	B	C	2K
R5110	B	C	2K
R5111	B	C	4L
R5112	B	C	1J
R5113	A	D	2L
R5114	A	D	2N
R5115	A	D	2M
R5116	A	D	2M
R5301	A	D	1C
R5302	B	C	3C
R5303	B	C	3C
R5304	A	D	1E
R5305	A	D	4I
R5306	B	C	3D
R5307	B	C	1F
R5308	B	C	4G
R5309	B	C	4G
R5310	B	C	3F
R5311	B	C	3E
R5312	B	C	1D
R5313	A	D	1D
R5314	B	C	3D
R5315	B	C	4D
R5316	B	C	4C
R5317	B	C	3B
R5318	B	C	3B
R5319	A	D	3D
R5320	B	C	2D
R5321	B	C	4E
R5322	B	C	4F
R5323	A	D	4H
R5324	A	D	5C
R5325	B	C	3D
R5326	B	C	3D
R5327	B	C	3D
R5328	B	C	5M
R5329	A	D	5N
R5330	A	D	5M
R5331	B	C	3C
R5332	B	C	3C
R5333	A	D	2E
R5334	A	D	2E
R6020	B	C	22N
R6021	B	C	22M
R6022	B	C	22N
R6023	B	C	22M
R6025	B	C	22N
R6030	B	C	22I
R6031	B	C	21K
R6032	B	C	20G
R6033	B	C	21G
R6034	B	C	22I
R6035	B	C	22H
R6037	B	C	22H
R6038	B	C	22L
R6039	B	C	22H
R6050	B	C	21O
R6051	B	C	22O
R6052	B	C	22O
R6053	B	C	22P
R6080	B	C	21G
R6081	B	C	21G
R6082	B	C	22N
R6101	B	C	19P
R6102	B	C	20P
R6508	B	C	21F
R6509	B	C	21G
R6510	B	C	21F
R6511	B	C	21G
R6551	B	C	21I
R6552	B	C	21I
R6553	A	D	21D
R6554	B	C	22E
R7202	B	C	16P
R7203	B	C	16P
R7204	A	D	15P
R7501	B	C	12P
R7502	B	C	13P
R7503	B	C	12O
R7504	B	C	13O
R7506	B	C	9P
R7507	B	C	9P
R7509	B	C	9P
R7511	B	C	9P
R7513	B	C	7P
R7514	B	C	8P
R7515	B	C	7O
R7516	B	C	8P
R7517	B	C	9P
R7518	B	C	9O
R7519	A	D	9O
R7520	B	C	8O
R7521	A	D	8O
R7522	B	C	8O
R7523	B	C	11P
R7524	B	C	11P
R7525	B	C	11Q
R7526	B	C	11P
R7527	B	C	11P
R7528	B	C	10P
R7529	B	C	10P
R7530	B	C	21A
R7531	B	C	11P
R7532	B	C	12O
R7533	B	C	12O
R7534	B	C	12P
R7535	B	C	13O
R7536	B	C	15P
R7537	B	C	14P
R7538	B	C	13O
R7541	A	D	11O
R7542	B	C	11O
TEST POINT			
TP106	A	D	21H
TP111	A	D	15M
TP2033	A	D	8M
TP2034	A	D	21H
TP2253	A	D	16L
TP2254	A	D	16L
TP3901	B	C	8C
TP3902	B	C	8B
TP3903	B	C	11C
TP3904	B	C	11C
TP3905	B	C	12B
TP4001	A	D	9M
OTHER			
CF2501	A	D	18D
CF3301	A	D	16C
CF6031	A	D	21J
CP3501	A	D	14A
CP4001	A	D	5J
CP5301	A	D	1E
CP5302	A	D	4G
CP5303	A	D	4E
F5001	A	D	1P
GND1	A	D	19K
GND2	A	D	21P
K5101	A	D	3K
LC2501	A	D	20B
LF5001	A	D	2P
LF5002	A	D	4O
LPF2501	A	D	21C
PC3001	A	D	17A
PC3002	A	D	9C
PC5101	A	D	4L
PC5102	A	D	4M
PC5301	A	D	2D
S3002	A	D	7A
S6050	A	D	17P
SG5001	A	D	3P
T2051	A	D	6J
T2052	A	D	20F
T5001	A	D	1J
TU6001	A	D	21P
VA5001	A	D	2O
VA5002	A	D	4P
VR2251	A	D	19L
WR1	A	D	16I
WR2	A	D	14O
WR3	A	D	11I
WR4	A	D	21I
X1	A	D	14J
X2	A	D	14J
X3001	A	D	11C
X3002	A	D	12C

4.10 MAIN, A/C HEAD AND LOADING MOTOR CIRCUIT BOARDS



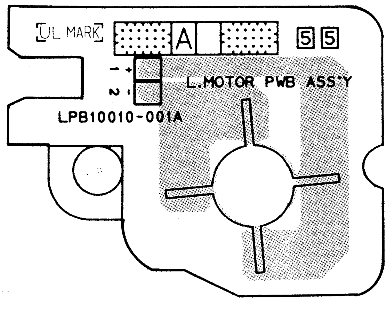
DANGEROUS VOLTAGE
PRIMARY
REG
AV
TERM
RM
TUNER
VSC
SYSCON
03 MAIN PWB
LPB10048-001D
LIVE BRN
NEUTRAL BLU
T5001
P
O
N
M
L
K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

— A/C HEAD —



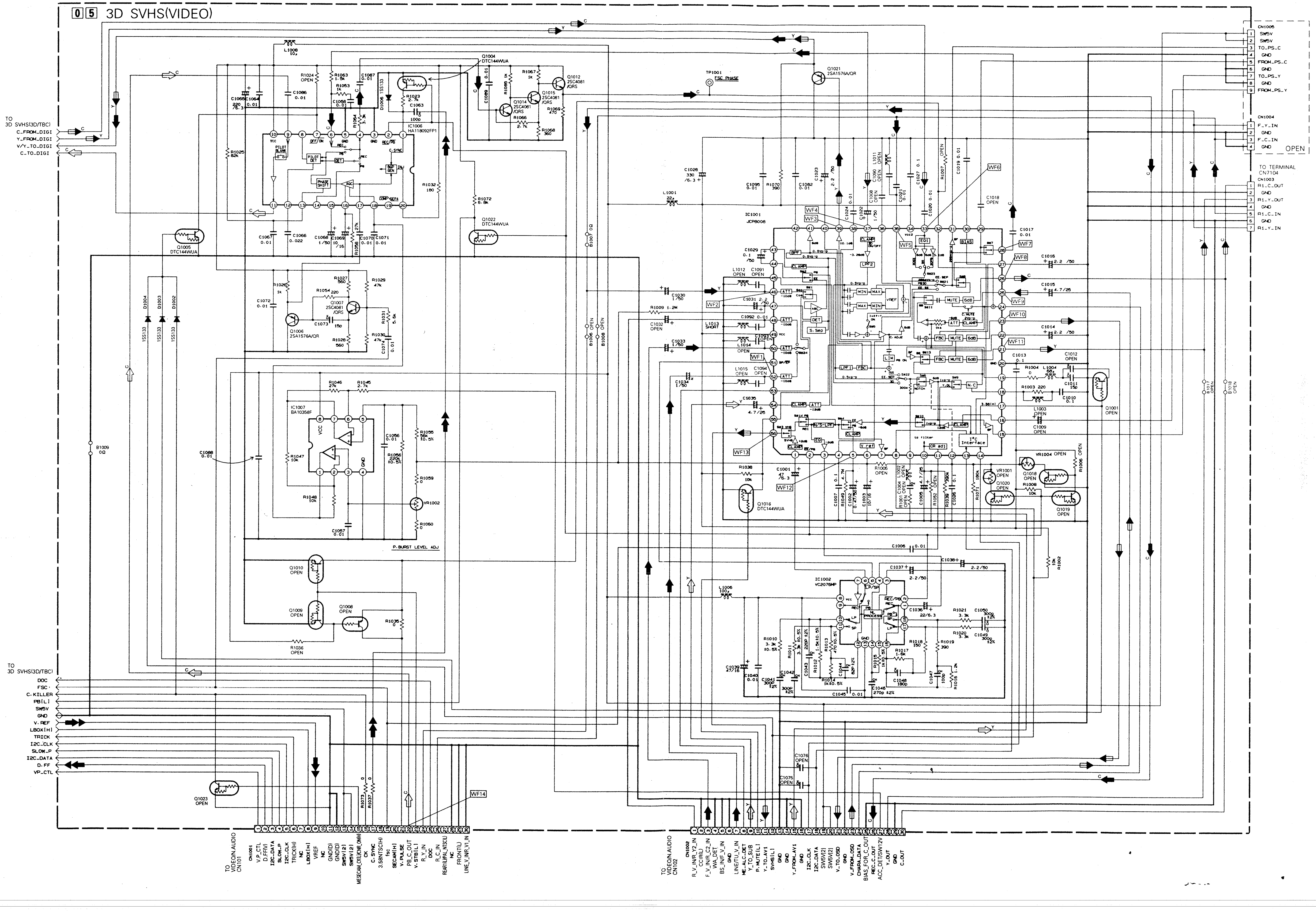
LPB10010-001A
1
2
7
6
UL MARK
A/C HEAD PWB
1
2

— LOADING MOTOR —

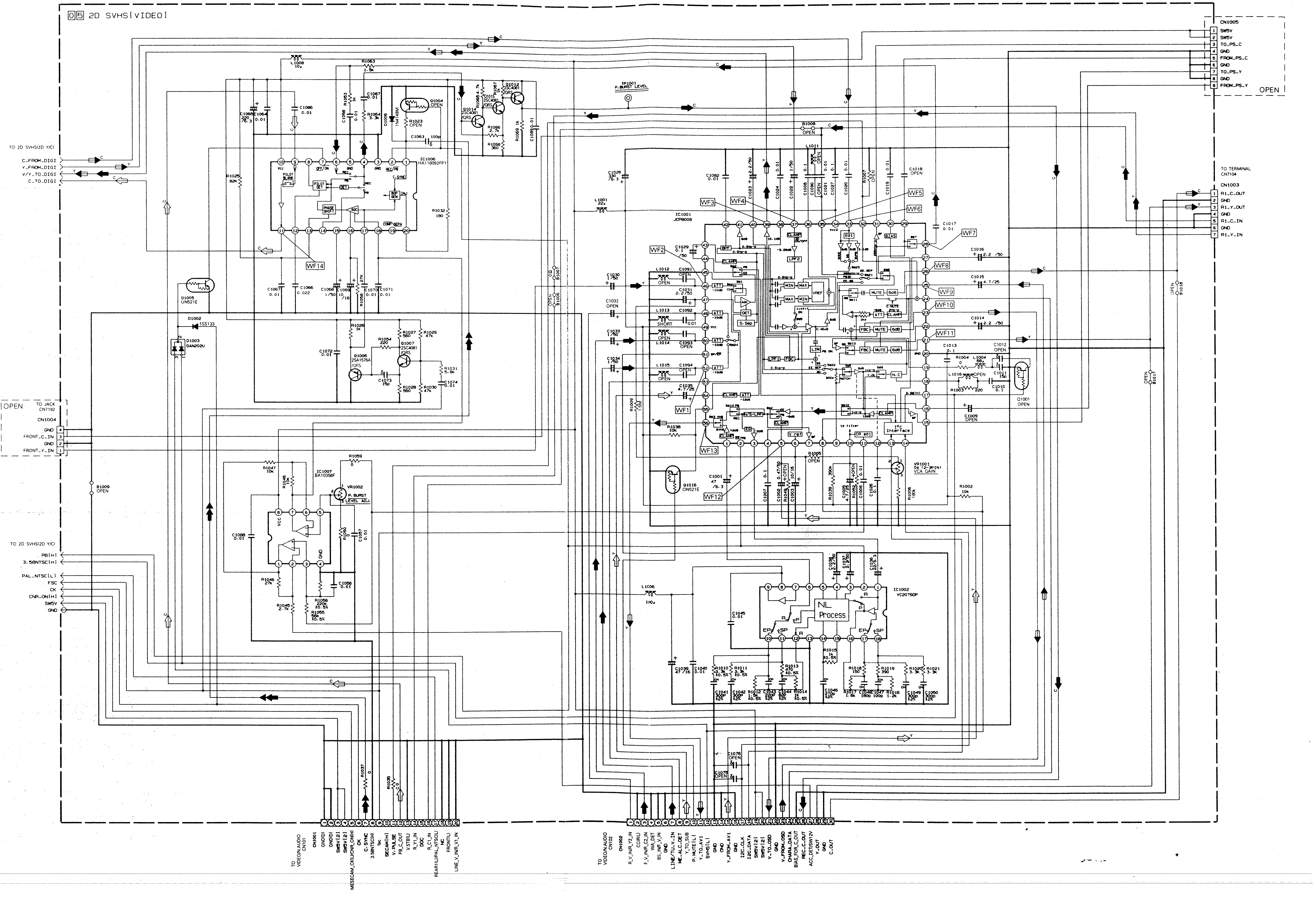


UL MARK
A
55
L.MOTOR PWB ASS'Y
LPB10010-001A

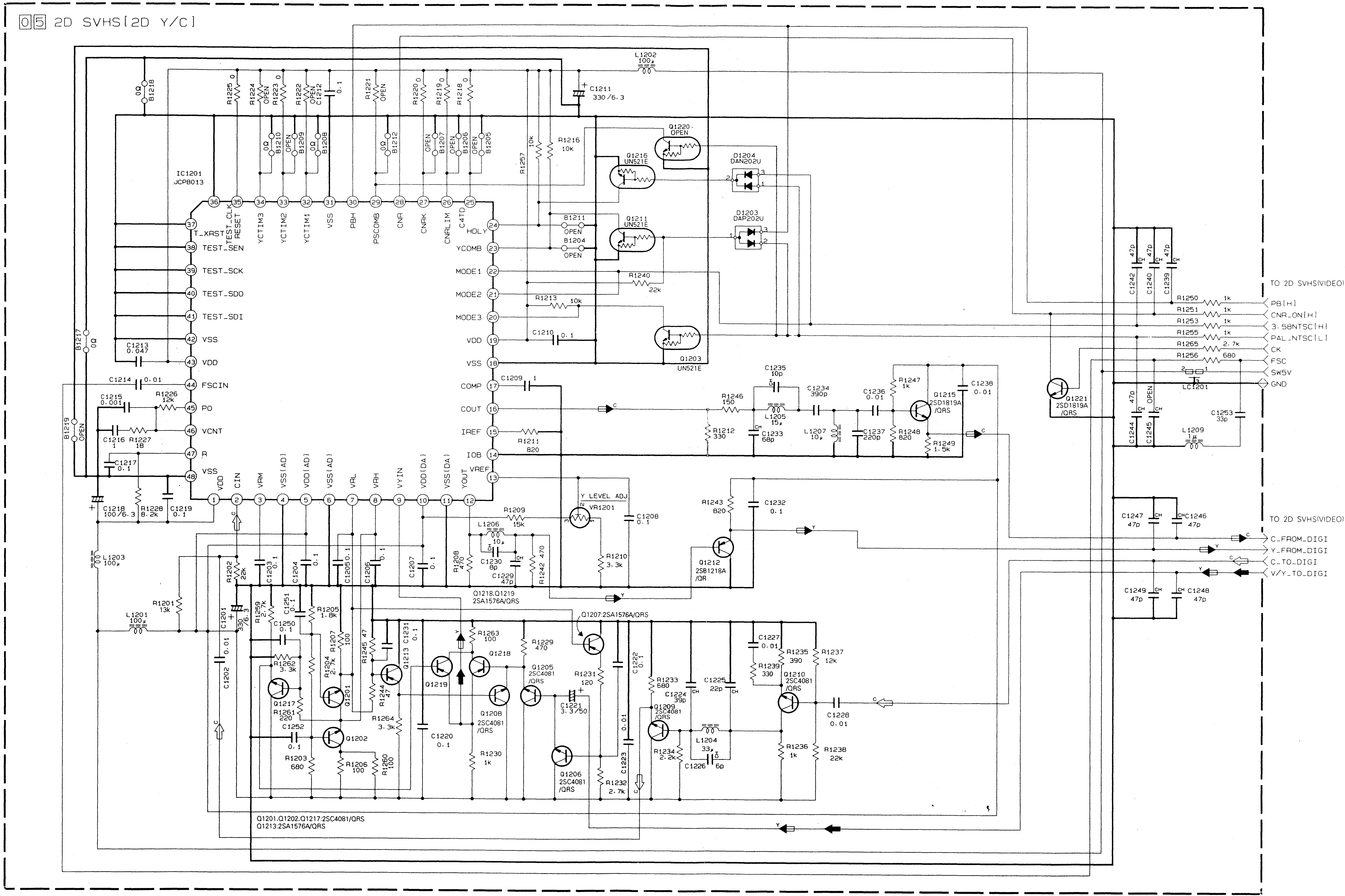
4.11 3D SVHS(VIDEO) SCHEMATIC DIAGRAM (VSH 2080)


05 3D SVHS(VIDEO)
TO
3D SVHS(3D/TBC)
C_FROM_DIGI
Y_FROM_DIGI
V/Y_TO_DIGI
C_TO_DIGI
TO
3D SVHS(3D/TBC)
DOC
FSC
C.KILLER
PB[L]
SW5V
GND
V.REF
LBOX[H]
TRICK
I2C_CLK
SLOW_P
I2C_DATA
D.FF
VP_CTL
CN1006
1 SW5V
2 SW5V
3 TO_PS_C
4 GND
5 FROM_PS_C
6 GND
7 TO_PS_Y
8 GND
9 FROM_PS_Y
CN1004
1 F_Y_IN
2 GND
3 F_C_IN
4 GND
OPEN
TO TERMINAL
CN7104
CN1003
1 R1_C_OUT
2 GND
3 R1_Y_OUT
4 GND
5 R1_C_IN
6 GND
7 R1_Y_IN
TO
VIDEO/N.AUDIO
CN101
CN1001
V.P_CTL
D.FF(V)
I2C_DATA
SLOW_P
I2C_CLK
TRICK(H)
NC
LBOX[H]
VREF
NC
GND(D)
GND(D)
SW5V[2]
SW5V[2]
MESECAM_CK(L)/CNR_ON(H)
CK
C.SYNC
3.58NTSC(H)
fsc
SECAM[H]
V.PULSE
PB_C_OUT
V.STB[L]
R_Y_IN
DOC
R_C_IN
REAR1(L)/PAL_NTSC(L)
NC
FRONT(L)
LINE_V_IN/R_V1_IN
TO
VIDEO/N.AUDIO
CN102
CN1002
R_V_IN/R_Y2_IN
CCIR(L)
F_V_IN/R_C2_IN
WA_DET
BS_IN/F_V_IN
GND
LINE/TU_V_IN
ME_ALC_DET
Y_TO_SUB
P.MUTE[L]
Y_TO_AV1
SVHS[L]
GND
GND
Y_FROM_AV1
GND
I2C_CLK
I2C_DATA
SW5V[2]
SW5V[2]
V_TO_OSD
GND
V_FROM_OSD
CHARA_DATA
BIAS_FOR_C_OUT
REC_C_OUT
ACC_DET/SW12V
Y_OUT
GND
C_OUT
IC1006
HA118092FP1
IC1001
JCP8006
IC1002
VC2076MP
IC1007
BA10358F
Q1004
DTC144WUA
Q1005
DTC144WUA
Q1022
DTC144WUA
Q1016
DTC144WUA
Q1021
2SA1576A/QR
Q1006
2SA1576A/QR
Q1007
2SC4081
/QRS
Q1012
2SC4081
/QRS
Q1014
2SC4081
/QRS
Q1015
2SC4081
/QRS
Q1001
OPEN
Q1008
OPEN
Q1009
OPEN
Q1010
OPEN
Q1018
OPEN
Q1019
OPEN
Q1020
OPEN
Q1023
OPEN
D1002
D1003
D1004
1SS133
D1006
1SS133
TP1001
FSC_PHASE
VR1001
OPEN
VR1002
VR1004 OPEN
P.BURST LEVEL ADJ
L1006
10μ
L1001
22μ
L1005
100μ
B1009
0Ω
B1007
0Ω
B1005
OPEN
B1008
OPEN
WF1
WF2
WF4
WF5
WF6
WF7
WF8
WF9
WF10
WF11
WF12
WF13
WF14
PILOT BLANK
PILOT DET
DET
PHASE SHIFT
AGC
COMP
C.SYNC
REC/PB
CLAMP
BPF
LPF
ATT
MIN
MAX
VREF
S.Sep
MUTE
FBC
LIM
NOTCH
Y ref
CR adj
I²C Interface
EQ
BIAS
NL PROCESS
REC/PB
LP
SP
C
Y

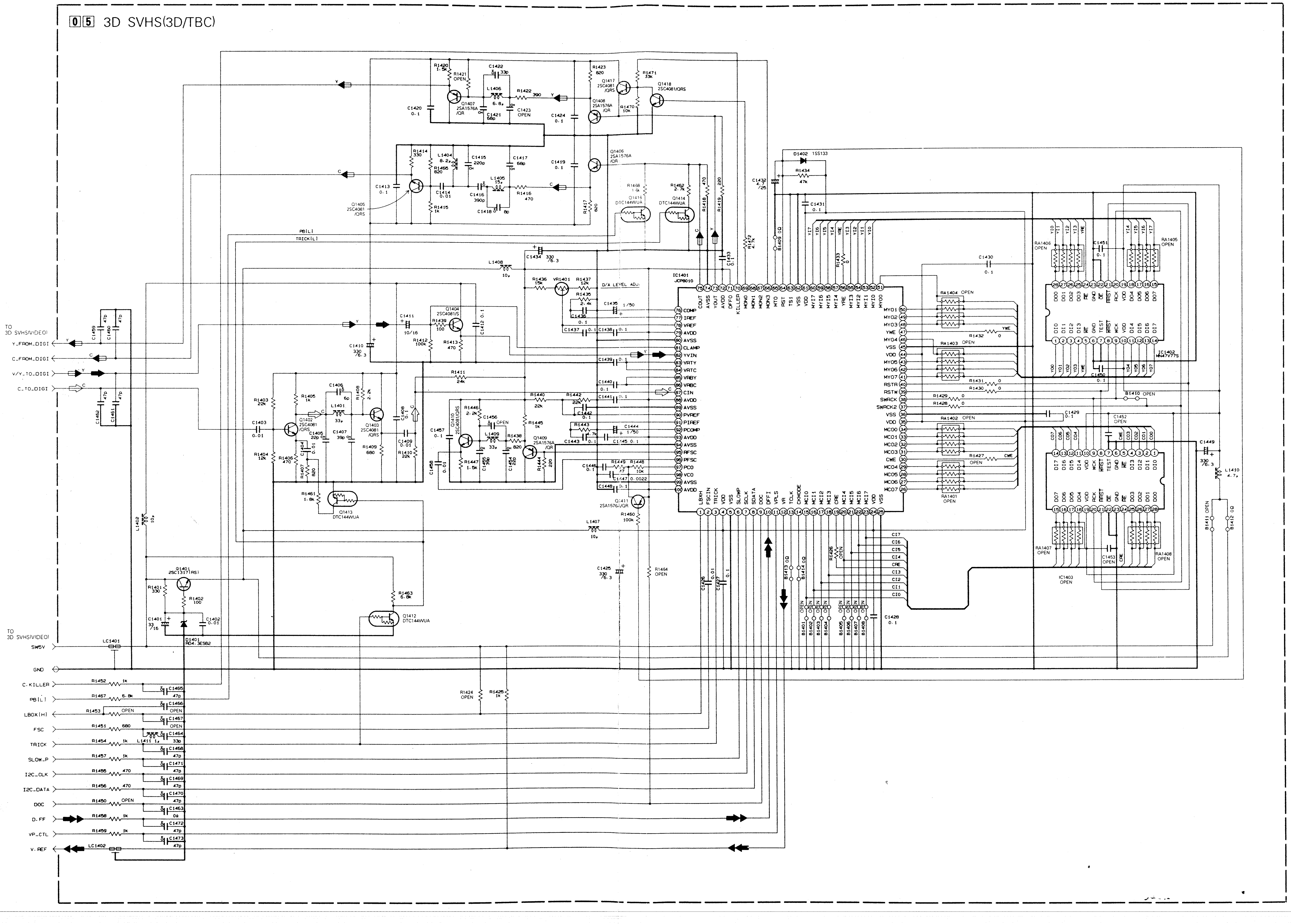
4.12 2D SVHS(VIDEO) SCHEMATIC DIAGRAM (VSH 2050)


05 2D SVHS[VIDEO]
TO 2D SVHS(2D Y/C)
C_FROM_DIGI
Y_FROM_DIGI
V/Y_TO_DIGI
C_TO_DIGI
OPEN
TO JACK CN7192
CN1004
GND 4
FRONT_C_IN 3
GND 2
FRONT_Y_IN 1
TO 2D SVHS(2D Y/C)
PB[H]
3.58NTSC[H]
PAL_NTSC[L]
FSC
CK
CNR_ON[H]
SW5V
GND
IC1006 HA118092FP1
IC1007 BA10358F
VR1002 P. BURST LEVEL ADJ.
Q1004 OPEN
Q1005 UN521E
D1002 1SS133
D1003 DAN202U
Q1006 2SA1576A
Q1007 2SC4081
TP1001 P. BURST LEVEL
IC1001 JCP8008
WF1
WF2
WF3
WF4
WF5
WF6
WF7
WF8
WF9
WF10
WF11
WF12
WF13
WF14
Q1016 UN521E
VR1001 VCA GAIN
Q1001 OPEN
IC1002 VC2076DP
NL Process
CN1005
1 SW5V
2 SW5V
3 TO_PS_C
4 GND
5 FROM_PS_C
6 GND
7 TO_PS_Y
8 GND
9 FROM_PS_Y
OPEN
TO TERMINAL CN7104
CN1003
1 R1_C_OUT
2 GND
3 R1_Y_OUT
4 GND
5 R1_C_IN
6 GND
7 R1_Y_IN
TO VIDEO/N.AUDIO CN101
CN1001
1 GND(D)
2 GND(D)
3 SW5V[2]
4 SW5V[2]
5 MESECAM_CK(L)/CNR_ON(H)
6 CK
7 C.SYNC
8 3.58NTSC(H)
9 fsc
10 SECAM[H]
11 V.PULSE
12 PB_C_OUT
13 V.STB(L)
14 R_Y1_IN
15 DOC
16 R_C1_IN
17 REAR1(L)/PAL_NTSC(L)
18 NC
19 FRONT(L)
20 LINE_V_IN/R_V1_IN
TO VIDEO/N.AUDIO CN102
CN1002
1 R_V_IN/R_Y2_IN
2 CCIR(L)
3 F_V_IN/R_C2_IN
4 WA_DET
5 BS_IN/F_V_IN
6 GND
7 LINE/TU_V_IN
8 ME_ALC_DET
9 Y_TO_SUB
10 P. MUTE[L]
11 Y_TO_AV1
12 SVHS[L]
13 GND
14 GND
15 Y_FROM_AV1
16 GND
17 I2C_CLK
18 I2C_DATA
19 SW5V[2]
20 SW5V[2]
21 V_TO_OSD
22 GND
23 V_FROM_OSD
24 CHARA_DATA
25 BIAS_FOR_C_OUT
26 REC_C_OUT
27 ACC_DET/SW12V
28 Y_OUT
29 GND
30 C_OUT

4.13 2D SVHS(2D Y/C) SCHEMATIC DIAGRAM (VSH 2050)

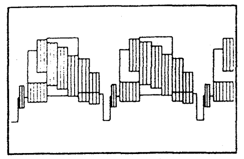

05 2D SVHS[2D Y/C]
IC1201
JCP8013
T_XRST
TEST_SEN
TEST_SCK
TEST_SDO
TEST_SDI
VSS
VDD
FSCIN
PO
VCNT
R
VSS
TEST_CLK
RESET
YCTIM3
YCTIM2
YCTIM1
VSS
PBH
PSCOMB
CNR
CNRK
CNRLIM
C4TD
HDLY
YCOMB
MODE1
MODE2
MODE3
VDD
VSS
COMP
COUT
IREF
IOB
VREF
VDD
CIN
VRM
VSS(AD)
VDD(AD)
VSS(AD)
VRL
VRH
VYIN
VDD(DA)
VSS(DA)
YOUT
L1202 100μ
C1211 330/6.3
Q1220 OPEN
Q1216 UN521E
Q1211 UN521E
Q1203 UN521E
D1204 DAN202U
D1203 DAP202U
R1216 10k
R1257 10k
B1211 OPEN
B1204 OPEN
R1240 22k
R1213 10k
C1210 0.1
C1209 1
R1211 820
Y LEVEL ADJ
VR1201
C1208 0.1
R1210 3.3k
R1209 15k
L1206 10μ
C1230 8p
C1229 47p
R1242 470
R1208 470
C1207 0.1
Q1218,Q1219 2SA1576A/QRS
Q1207:2SA1576A/QRS
R1243 820
C1232 0.1
Q1212 2SB1218A /QR
R1246 150
C1235 10p
L1205 15μ
C1234 390p
C1233 68p
R1212 330
L1207 10μ
C1236 0.01
C1237 220p
R1247 1k
Q1215 2SD1819A /QRS
R1248 820
R1249 1.5k
C1238 0.01
Q1221 2SD1819A /QRS
C1242 47p
C1240 47p
C1239 47p
C1244 47p
C1245 OPEN
LC1201
L1209 1μ
C1253 33p
R1250 1k
R1251 1k
R1253 1k
R1255 1k
R1265 2.7k
R1256 680
TO 2D SVHS(VIDEO)
PB(H)
CNR_ON(H)
3.58NTSC(H)
PAL_NTSC(L)
CK
FSC
SW5V
GND
C1247 47p
C1246 47p
C1249 47p
C1248 47p
C_FROM_DIGI
Y_FROM_DIGI
C_TO_DIGI
V/Y_TO_DIGI
R1225 0
R1224 OPEN
R1223 0
R1222 OPEN
C1212 0.1
R1221 OPEN
R1220 0
R1219 0
R1218 0
B1210 0Ω
B1209 OPEN
B1208 0Ω
B1212 0Ω
B1207 OPEN
B1206 OPEN
B1205 OPEN
B1218 0Ω
B1217 0Ω
B1219 OPEN
C1213 0.047
C1214 0.01
C1215 0.001
R1226 12k
C1216
R1227 18
C1217 0.1
C1218 100/6.3
R1228 8.2k
C1219 0.1
L1203 100μ
L1201 100μ
R1201 13k
R1202 22k
C1201 330/6.3
C1202 0.01
C1203 0.1
C1204 0.1
C1205 0.1
C1206 0.1
R1259 2.7k
C1251 0.1
C1250 0.1
R1262 3.3k
R1205 1.8k
R1207 100
R1204 2.7k
R1245 47
C1231 0.1
Q1213
R1244 47
Q1217
R1261 220
C1252 0.1
Q1201
Q1202
R1203 680
R1206 100
R1260 100
R1264 3.3k
Q1219
R1263 100
Q1218
C1220 0.1
Q1208 2SC4081 /QRS
R1230 1k
R1229 470
Q1205 2SC4081 /QRS
R1231 120
C1221 3.3/50
Q1206 2SC4081 /QRS
R1232 2.7k
C1222 0.1
C1223 0.01
R1233 680
C1224 39p
Q1209 2SC4081 /QRS
C1225 22p
L1204 33μ
C1226 6p
R1234 2.2k
C1227 0.01
R1235 390
R1239 330
R1237 12k
Q1210 2SC4081 /QRS
C1228 0.01
R1236 1k
R1238 22k
Q1201,Q1202,Q1217:2SC4081/QRS
Q1213:2SA1576A/QRS

4.14 3D SVHS(3D/TBC) SCHEMATIC DIAGRAM (VSH 2080)


05 3D SVHS(3D/TBC)
TO
3D SVHS(VIDEO)
Y_FROM_DIGI
C_FROM_DIGI
V/Y_TO_DIGI
C_TO_DIGI
TO
3D SVHS(VIDEO)
SW5V
GND
C.KILLER
PB(L)
LBOX(H)
FSC
TRICK
SLOW_P
I2C_CLK
I2C_DATA
DOC
D.FF
VP_CTL
V.REF
LC1401
LC1402
R1452 1k
R1467 6.8k
R1453 OPEN
R1451 680
R1454 1k
L1411 1μ
R1457 1k
R1455 470
R1456 470
R1450 OPEN
R1458 1k
R1459 1k
C1465 47p
C1466 OPEN
C1467 OPEN
C1464 33p
C1468 47p
C1471 47p
C1469 47p
C1470 47p
C1463 0Ω
C1472 47p
C1473 47p
Q1401 2SC1317(RS)
R1401 330
R1402 100
C1401 33/16
C1402 0.01
D1401 RD4.3ESB2
PB(L)
TRICK(L)
D/A LEVEL ADJ.
VR1401
IC1401
JCP8010
COUT
AVSS
YOUT
AVDD
DFFO
KILLER
MON0
MON1
MON2
MON3
MTO
RST
TS1
VSS
VDD
MYI7
MYI6
MYI5
MYI4
YRE
MYI3
MYI2
MYI1
MYI0
MYO0
COMP
IREF
VREF
AVDD
AVSS
CLAMP
YVIN
VRTY
VRTC
VRBY
VRBC
CIN
AVDD
AVSS
PVREF
PIREF
PCOMP
AVDD
AVSS
RFSC
PFSC
PCO
VCO
AVSS
AVDD
MYO1
MYO2
MYO3
YWE
MYO4
VSS
VDD
MYO5
MYO6
MYO7
RSTR
RSTW
SWRCK
SWRCK2
VSS
VDD
MCO0
MCO1
MCO2
MCO3
CWE
MCO4
MCO5
MCO6
MCO7
LBXH
FSCIN
TRICK
VDD
VSS
SLOWP
SCLK
SDATA
DOC
DFFI
VPLS
VR
TCLK
CKMODE
MCI0
MCI1
MCI2
MCI3
CRE
MCI4
MCI5
MCI6
MCI7
VDD
VSS
CI7
CI6
CI5
CI4
CRE
CI3
CI2
CI1
CI0
IC1402
MN47V77S
IC1403
OPEN
RA1401 OPEN
RA1402 OPEN
RA1403 OPEN
RA1404 OPEN
RA1405 OPEN
RA1406 OPEN
RA1407 OPEN
RA1408 OPEN
D1402 1SS133
Q1402 2SC4081/QRS
Q1403 2SC4081/QRS
Q1404 2SC4081/S
Q1405 2SC4081/QRS
Q1406 2SA1576A/QR
Q1407 2SA1576A/QR
Q1408 2SA1576A/QR
Q1409 2SA1576A/QR
Q1410 2SC4081/QRS
Q1411 2SA1576A/QR
Q1412 DTC144WUA
Q1413 DTC144WUA
Q1414 DTC144WUA
Q1415 DTC144WUA
Q1417 2SC4081/QRS
Q1418 2SC4081/QRS

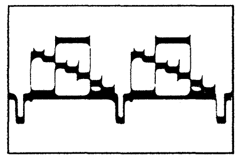
WAVEFORMS - 3D SVSH(VIDEO) - VSH 2080

WF1 IC1001-52



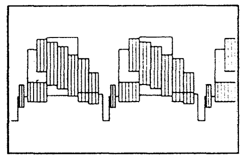
REC 0.76 Vp-p
20 mV/20 μsec/DIV

WF2 IC1001-46



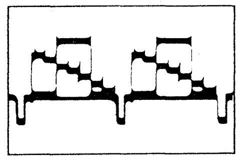
REC 1.0 Vp-p
20 mV/20 μsec/DIV

WF3-1 IC1001-39



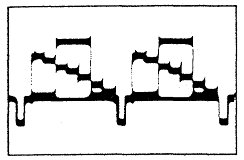
REC 1.8 Vp-p
50 mV/20 μsec/DIV

WF3-2 IC1001-39



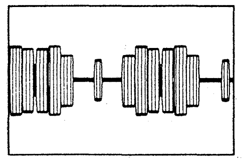
REC/PB 1.7 Vp-p
50 mV/20 μsec/DIV

WF4 IC1001-37



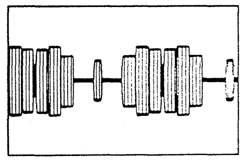
REC/PB 0.8 Vp-p
20 mV/20 μsec/DIV

WF5 IC1001-35



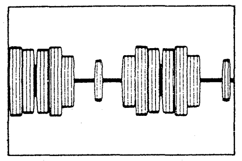
REC 0.65 Vp-p
20 mV/20 μsec/DIV

WF6-1 IC1001-33



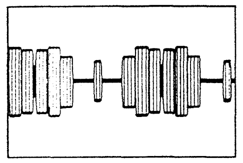
REC 0.35 Vp-p
10 mV/20 μsec/DIV

WF6-2 IC1001-33



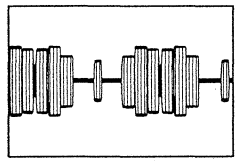
PB 0.5 Vp-p
10 mV/20 μsec/DIV

WF7 IC1001-28



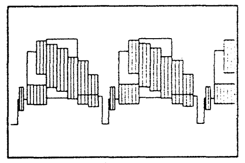
REC 0.7 Vp-p
20 mV/20 μsec/DIV

WF8 IC1001-26



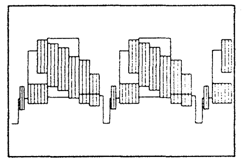
REC/PB 1.5 Vp-p
50 mV/20 μsec/DIV

WF9 IC1001-25



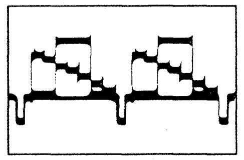
REC/PB 2.2 Vp-p
50 mV/20 μsec/DIV

WF10 IC1001-23



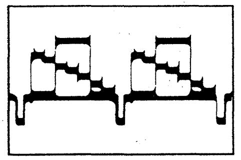
REC/PB 2.2 Vp-p
50 mV/20 μsec/DIV

WF11 IC1001-21



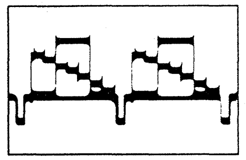
REC/PB 2.2 Vp-p
50 mV/20 μsec/DIV

WF12 IC1001-5



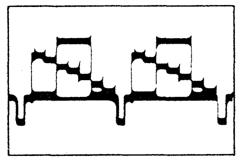
PB 0.56 Vp-p
20 mV/20 μsec/DIV

WF13-1 IC1001-56



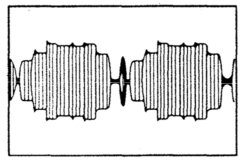
REC 0.52 Vp-p
20 mV/20 μsec/DIV

WF13-2 IC1001-56



PB 0.56 Vp-p
20 mV/20 μsec/DIV

WF14 CN1001-22



PB 0.62 Vp-p
20 mV/20 μsec/DIV

COMPONENT PARTS LOCATION GUIDE <3D SVHS>

REF.NO.	LOCATION		
CAPACITOR			
C1001	A	D	10B
C1002	A	D	10B
C1003	A	D	10C
C1004	B	C	11C
C1005	A	D	11C
C1006	B	C	11C
C1007	A	C	10C
C1008	A	C	9D
C1009	A	D	11C
C1010	A	C	10D
C1011	B	C	11D
C1012	A	C	11D
C1013	A	C	9C
C1014	A	D	11D
C1015	A	D	12A
C1016	A	D	10D
C1017	B	C	10E
C1018	B	C	10E
C1019	B	C	10E
C1020	B	C	9E
C1021	B	C	9E
C1022	A	D	9D
C1023	A	D	9D
C1024	A	C	9C
C1026	B	C	10B
C1027	A	C	10D
C1028	A	D	9C
C1029	A	D	9D
C1030	A	D	8C
C1031	A	D	9C
C1032	A	D	9B
C1033	A	D	9B
C1034	A	D	9B
C1035	A	D	9B
C1036	A	D	12B
C1037	A	D	12B
C1038	A	D	12C
C1039	A	D	12D
C1040	B	C	12D
C1041	B	C	12D
C1042	B	C	13C
C1043	A	C	12C
C1044	A	C	13C
C1045	B	C	12C
C1046	A	C	13C
C1047	A	C	12B
C1048	A	C	13B
C1049	B	C	13B
C1050	B	C	12B
C1056	B	C	8D
C1057	B	C	8D
C1058	B	C	7C
C1063	B	C	7C
C1064	B	C	7C
C1065	A	D	7B
C1066	B	C	7C
C1067	B	C	7C
C1068	A	D	8D
C1069	A	D	8D
C1070	B	C	7D
C1071	A	C	8D
C1072	B	C	7D
C1073	A	C	7D
C1074	B	C	7D
C1075	A	C	10A
C1076	A	C	10A
C1082	B	C	9D
C1086	B	C	7C
C1087	B	C	7C
C1088	B	C	8D
C1089	A	C	7E
C1090	B	C	9D
C1091	B	C	8C
C1092	B	C	8B
C1093	B	C	8B
C1094	B	C	9B
C1095	A	C	10D
C1401	A	D	6B
C1402	B	C	6B
C1403	B	C	6D
C1404	B	C	6D
C1405	A	C	6D
C1406	B	C	6D
C1407	A	C	5D
C1408	A	C	5D
C1409	A	C	6D
C1410	A	D	6D
C1411	A	D	5D
C1412	A	C	5D
C1413	A	C	6E
C1414	B	C	6E
C1415	B	C	5E
C1416	B	C	5E
C1417	B	C	5E
C1418	B	C	5E
C1419	B	C	4E
C1420	A	C	5D
C1421	A	C	5E
C1422	A	C	4E
C1423	A	C	4E
C1424	A	C	5D
C1425	A	D	3B
C1426	B	C	4C
C1427	B	C	4C
C1428	B	C	3C
C1429	B	C	3C
C1430	B	C	3D
C1431	B	C	3D
C1432	A	D	3E
C1433	B	C	4D
C1434	A	D	4B
C1435	A	D	5E
C1436	B	C	4D
C1437	B	C	5D
C1438	B	C	4D
C1439	B	C	4D
C1440	B	C	4D
C1441	B	C	4D
C1442	A	C	5D
C1443	B	C	5C
C1444	A	D	5C
C1445	B	C	4C
C1446	A	C	4C
C1447	A	C	4C
C1448	A	C	4C
C1449	A	D	2B
C1450	B	C	2D
C1451	B	C	1E
C1452	B	C	2C
C1453	B	C	2B
C1454	A	C	6B
C1455	B	C	5B
C1456	B	C	5B
C1457	B	C	5B
C1458	A	C	5C
C1459	A	C	6E
C1460	A	C	6E
C1461	A	C	6D
C1462	A	C	6C
C1463	A	C	6C
C1464	A	C	6C
C1465	A	C	6C
C1466	B	C	6A
C1467	A	C	5B
C1468	A	C	5B
C1469	A	C	5B
C1470	A	C	5B
C1471	A	C	5B
C1472	A	C	5B
C1473	A	C	4B
CONNECTOR			
CN1001	A	D	6A
CN1002	A	D	9A
CN1003	A	D	12E
CN1004	A	D	7E
CN1005	A	D	11E
DIODE			
D1002	A	D	7B
D1003	A	D	7B
D1004	A	D	8B
D1006	A	D	8C
D1401	A	D	6B
D1402	A	D	3E
IC			
IC1001	B	C	10D
IC1002	A	C	12C
IC1006	A	C	7C
IC1007	A	C	8D
IC1401	A	C	4D
IC1402	A	C	2D
IC1403	A	C	2C
COIL			
L1001	A	D	9B
L1002	A	D	11B
L1003	A	D	11D
L1004	A	D	11D
L1006	A	D	12D
L1008	A	D	7B
L1011	A	D	9E
L1012	A	D	8C
L1013	A	D	8B
L1014	A	D	8A
L1015	A	D	9A
L1401	A	D	6D
L1402	A	D	6C
L1404	A	D	5E
L1405	A	D	5E
L1406	A	D	4E
L1407	A	D	4B
L1408	A	D	5B
L1409	A	D	5B
L1410	A	D	3B
L1411	A	D	6C
TRANSISTOR			
Q1001	A	C	11D
Q1004	A	C	8B
Q1005	B	C	7B
Q1006	B	C	7D
Q1007	A	C	7D
Q1008	A	C	8E
Q1009	A	C	8E
Q1010	B	C	8E
Q1012	B	C	7E
Q1014	B	C	7D
Q1015	A	C	7E
Q1016	A	C	10C
Q1018	B	C	11B
Q1019	B	C	11B
Q1020	B	C	10B
Q1021	A	C	9D
Q1022	A	C	7E
Q1023	B	C	7B
Q1401	A	D	6B
Q1402	B	C	6D
Q1403	A	C	6D
Q1404	A	C	5D
Q1405	B	C	6E
Q1406	B	C	4D
Q1407	A	C	5E
Q1408	A	C	4D
Q1409	A	C	6B
Q1410	A	C	5B
Q1411	A	C	5C
Q1412	B	C	5B
Q1413	A	C	6D
Q1414	B	C	4D
Q1416	B	C	5D
Q1417	A	C	4D
Q1418	A	C	4E
RESISTOR			
R1001	B	C	11C
R1002	A	C	10C
R1003	A	C	10D
R1004	B	C	11D
R1005	B	C	10C
R1006	A	C	10B
R1007	B	C	10E
R1008	A	C	10B
R1009	A	C	9C
R1010	B	C	12C
R1011	B	C	12C
R1012	A	C	12C
R1013	A	C	13C
R1014	A	C	13C
R1015	A	C	13C
R1016	A	C	12B
R1017	A	C	13B
R1018	A	C	13B
R1019	A	C	12B
R1020	B	C	13B
R1021	B	C	12B
R1023	A	C	8C
R1024	B	C	7C
R1025	A	C	7D
R1026	B	C	7D
R1027	A	C	7D
R1028	A	C	7D
R1029	A	C	7D
R1030	A	C	7D
R1031	B	C	7D
R1032	B	C	8C
R1035	B	C	8E
R1036	A	C	9E
R1037	A	C	7A
R1038	A	C	9C
R1039	A	C	9C
R1045	A	C	8D
R1046	A	C	8D
R1047	B	C	8D
R1048	A	C	8D
R1049	B	C	10B
R1052	B	C	10C
R1053	B	C	7C
R1054	A	C	7D
R1055	B	C	8E
R1056	B	C	8D
R1058	B	C	8D
R1059	B	C	8E
R1060	B	C	8E
R1063	A	C	7B
R1064	B	C	7C
R1065	A	C	7E
R1066	A	C	7D
R1067	A	C	7E
R1068	B	C	7D
R1069	B	C	7D
R1070	A	C	10D
R1071	B	C	11B
R1072	A	C	7D
R1073	B	C	7A
R1401	B	C	6B
R1402	B	C	6B
R1403	B	C	6D
R1404	A	C	6D
R1405	B	C	6D
R1406	A	C	6D
R1407	A	C	6D
R1408	B	C	5D
R1409	A	C	6D
R1410	A	C	5D
R1411	A	C	5D
R1412	B	C	5D
R1413	A	C	5D
R1414	B	C	6E
R1415	B	C	6E
R1416	B	C	5D
R1417	B	C	4D
R1418	B	C	4D
R1419	A	C	4D
R1420	A	C	5E
R1421	A	C	4E
R1422	A	C	4E
R1423	A	C	4D
R1424	A	C	5B
R1425	B	C	6B
R1426	A	C	3B
R1427	B	C	3C
R1428	B	C	3C
R1429	B	C	3C
R1430	B	C	3E
R1431	B	C	3D
R1432	B	C	3D
R1433	B	C	3D
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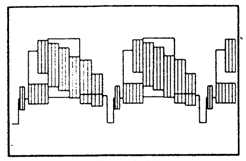
R1435	B	C	4D
R1436	B	C	5C
R1437	B	C	5D
R1438	B	C	5B
R1439	B	C	5D
R1440	B	C	5D
R1442	A	C	5D
R1443	A	C	5C
R1444	A	C	6B
R1445	A	C	5B
R1446	A	C	5B
R1447	A	C	5C
R1448	A	C	4C
R1449	A	C	5C
R1450	B	C	6C
R1451	B	C	6C
R1452	B	C	6C
R1453	B	C	5B
R1454	B	C	5B
R1455	B	C	5B
R1456	B	C	5B
R1457	B	C	5B
R1458	B	C	4B
R1459	B	C	4B
R1460	A	C	5B
R1461	A	C	6D
R1462	B	C	4D
R1463	B	C	6B
R1464	B	C	5C
R1465	A	C	6E
R1467	A	C	6E
R1468	B	C	4D
R1470	A	C	4E
R1471	A	C	4E
R1472	A	C	4E
OTHER			
LC1401	A	D	6B
LC1402	A	D	6C
RA1401	A	C	3C
RA1402	A	C	3C
RA1403	A	C	3D
RA1404	A	C	3D
RA1405	A	C	1E
RA1406	A	C	2E
RA1407	A	C	2B
RA1408	A	C	1B
TP1001	A	D	7E
VR1001	A	D	10B
VR1002	A	D	8E
VR1004	A	D	11B
VR1401	A	D	5C

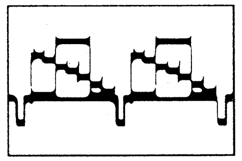
WAVEFORMS - 2D SVSH(VIDEO) - VSH 2050

WF1 IC1001-52



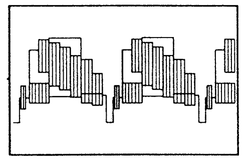
REC 1.0 Vp-p
50 mV/20 µsec/DIV

WF2 IC1001-46



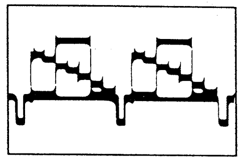
REC 1.0 Vp-p
50 mV/20 µsec/DIV

WF3-1 IC1001-39



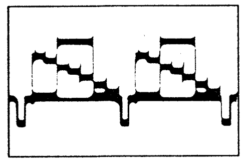
REC 1.8 Vp-p
50 mV/20 µsec/DIV

WF3-2 IC1001-39



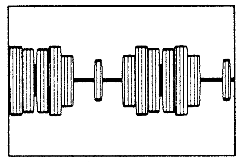
REC/PB 1.7 Vp-p
50 mV/20 µsec/DIV

WF4 IC1001-37



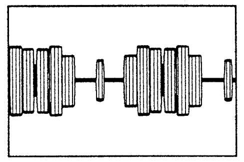
REC/PB 0.8 Vp-p
20 mV/20 µsec/DIV

WF5 IC1001-35



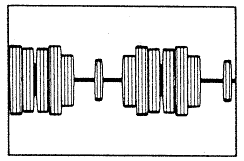
REC 0.65 Vp-p
20 mV/10 µsec/DIV

WF6-1 IC1001-33



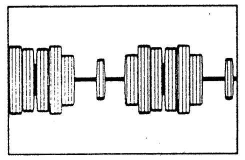
REC 0.35 Vp-p
10 mV/10 µsec/DIV

WF6-2 IC1001-33



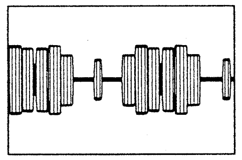
PB 0.48 Vp-p
10 mV/10 µsec/DIV

WF7 IC1001-28



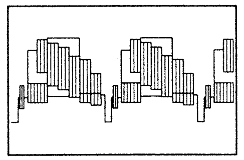
REC 0.7 Vp-p
20 mV/10 µsec/DIV

WF8 IC1001-26



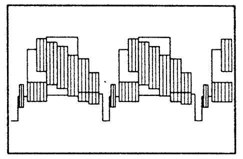
REC/PB 1.4 Vp-p
50 mV/10 µsec/DIV

WF9 IC1001-25



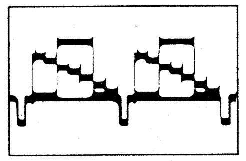
REC/PB 2.2 Vp-p
50 mV/20 µsec/DIV

WF10 IC1001-23



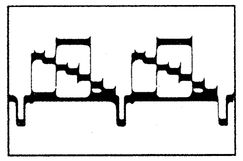
REC/PB 2.2 Vp-p
50 mV/20 µsec/DIV

WF11 IC1001-21



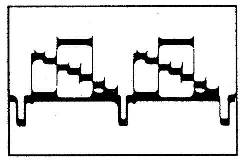
REC/PB 2.2 Vp-p
50 mV/20 µsec/DIV

WF12 IC1001-5



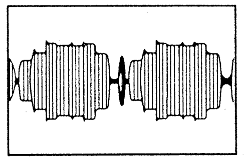
PB 0.56 Vp-p
20 mV/20 µsec/DIV

WF13 IC1001-56



REC/PB 0.57 Vp-p
20 mV/20 µsec/DIV

WF14 IC1006-11

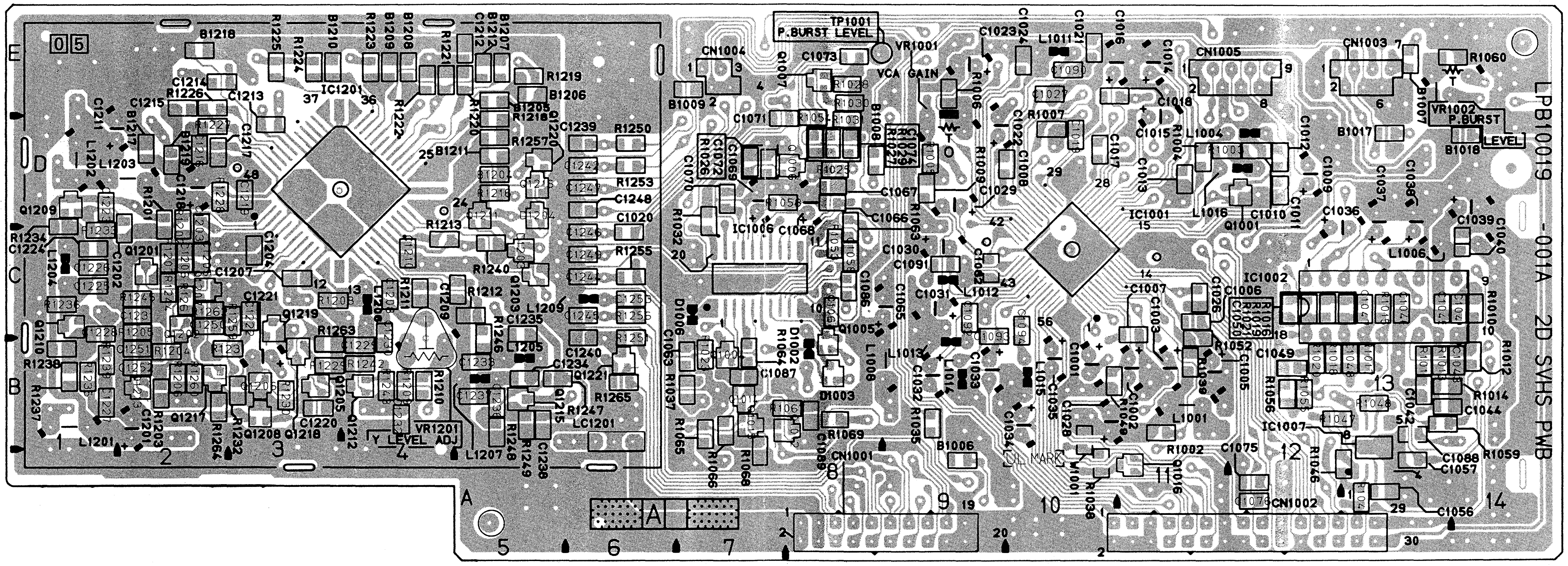


PB 0.55 Vp-p
10 mV/10 µsec/DIV

COMPONENT PARTS LOCATION GUIDE <2D SVHS>

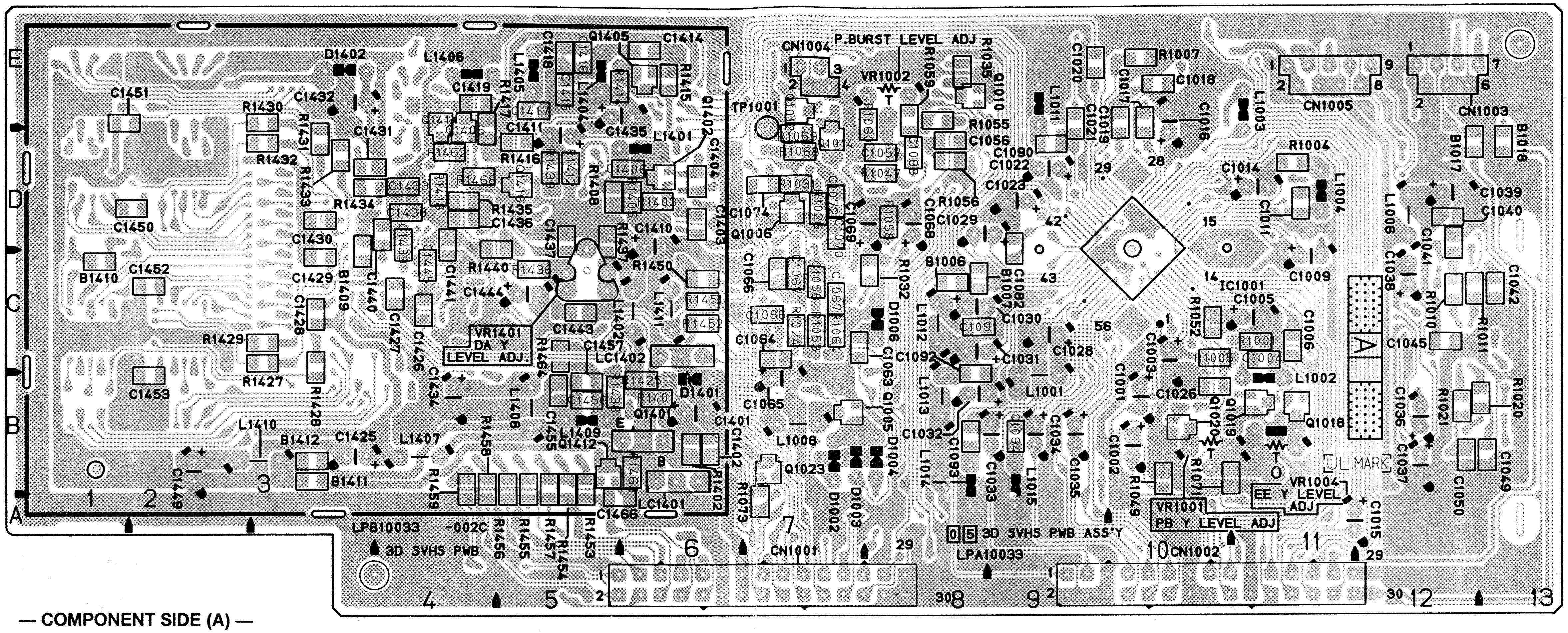
REF.NO.	LOCATION		
CAPACITOR			
C1001	A	D	10B
C1002	A	D	11B
C1003	A	D	11B
C1005	A	D	11B
C1006	B	C	11C
C1007	B	C	11C
C1008	B	C	10D
C1009	A	D	12D
C1010	B	C	12D
C1011	B	C	12D
C1012	B	C	12D
C1013	B	C	11D
C1014	A	D	11E
C1015	A	D	11E
C1016	A	D	11E
C1017	B	C	10D
C1018	B	C	10E
C1019	B	C	10D
C1020	B	C	6C
C1021	B	C	10E
C1022	A	D	9D
C1023	A	D	9E
C1024	B	C	10E
C1026	B	C	11C
C1027	B	C	10E
C1028	A	D	10B
C1029	A	D	9D
C1030	A	D	9C
C1031	A	D	9C
C1032	A	D	9B
C1033	A	D	9B
C1034	A	D	10B
C1035	A	D	10B
C1036	A	D	12D
C1037	A	D	13C
C1038	A	D	13C
C1039	A	D	14D
C1040	B	C	14C
C1041	B	C	14C
C1042	B	C	13B
C1043	B	C	14B
C1044	B	C	13B
C1045	B	C	13C
C1046	B	C	13C
C1047	B	C	13C
C1048	B	C	13B
C1049	B	C	12B
C1050	B	C	12C
C1056	B	C	13A
C1057	B	C	13A
C1058	B	C	8C
C1063	B	C	7B
C1064	B	C	8C
C1065	A	D	8C
C1066	B	C	8D
C1067	B	C	8D
C1068	A	D	8D
C1069	A	D	7D
C1070	B	C	7D
C1071	B	C	7D
C1072	B	C	7D
C1073	B	C	8E
C1074	B	C	8D
C1075	B	C	12A
C1076	B	C	12A
C1082	B	C	9C
C1086	B	C	8C
C1087	B	C	7B
C1088	B	C	13B
C1089	B	C	8B
C1090	B	C	10E
C1091	B	C	9C
C1092	B	C	9C
C1093	B	C	9C
C1094	B	C	10C
C1201	A	D	2B
C1202	B	C	2C
C1203	B	C	2C
C1204	B	C	3C
C1205	B	C	2C
C1206	B	C	2C
C1207	B	C	3C
C1208	B	C	4C
C1209	B	C	5C
C1210	B	C	4C
C1211	A	D	2D
C1212	B	C	5E
C1213	B	C	3D
C1214	B	C	2E
C1215	B	C	2E
C1216	B	C	2D
C1217	B	C	2D
C1218	A	D	2D
C1219	B	C	3D
C1220	B	C	3B
C1221	A	D	3B
C1222	B	C	3C
C1223	B	C	1D
C1224	B	C	1C
C1225	B	C	1C
C1226	B	C	1C
C1227	B	C	1B
C1228	B	C	1C
C1229	B	C	4B
C1230	B	C	4C
C1231	B	C	2C
C1232	B	C	4B
C1233	B	C	5B
C1234	B	C	5B
C1235	B	C	5C
C1236	B	C	5B
C1237	B	C	5B
C1238	B	C	5B
C1239	B	C	6D
C1240	B	C	6C
C1242	B	C	6D
C1244	B	C	6C
C1245	B	C	6C
C1246	B	C	6C
C1247	B	C	6D
C1248	B	C	6D
C1249	B	C	6C
C1250	B	C	2C
C1251	B	C	2B
C1252	B	C	2B
C1253	B	C	6C
CONNECTOR			
CN1001	A	D	8A
CN1002	A	D	11A
CN1003	A	D	12E
CN1004	A	D	7E
CN1005	A	D	11E
DIODE			
D1002	A	D	8B
D1003	B	C	8B
D1006	A	D	7C
D1203	B	C	5C
D1204	B	C	5D
IC			
IC1001	B	C	10C
IC1002	A	D	12C
IC1006	B	C	7C
IC1007	B	C	13B
IC1201	B	C	4D
COIL			
L1001	A	D	11B
L1004	A	D	12D
L1006	A	D	14C
L1008	A	D	8B
L1011	A	D	10E
L1012	A	D	9C
L1013	A	D	9B
L1014	A	D	9B
L1015	A	D	10B
L1016	A	D	12D
L1201	A	D	1B
L1202	A	D	1D
L1203	A	D	2D
L1204	A	D	1C
L1205	A	D	5B
L1206	A	D	4C
L1207	A	D	5B
L1209	A	D	6C
TRANSISTOR			
Q1001	B	C	12D
Q1004	B	C	7B
Q1005	B	C	8B
Q1006	B	C	8D
Q1007	B	C	8E
Q1012	B	C	8B
Q1014	B	C	7B
Q1015	B	C	7B
Q1016	B	C	11A
Q1201	B	C	2C
Q1202	B	C	2C
Q1203	B	C	5C
Q1205	B	C	3B
Q1206	B	C	3B
Q1207	B	C	2C
Q1208	B	C	3B
Q1209	B	C	1D
Q1210	B	C	1C
Q1211	B	C	5D
Q1212	B	C	4B
Q1213	B	C	2B
Q1215	B	C	5B
Q1216	B	C	5D
Q1217	B	C	2B
Q1218	B	C	3B
Q1219	B	C	3C
Q1220	B	C	5D
Q1221	B	C	6B
RESISTOR			
R1002	B	C	11B
R1003	B	C	11D
R1004	B	C	11D
R1005	B	C	9D
R1006	B	C	9E
R1007	B	C	10D
R1009	B	C	9D
R1010	B	C	14C
R1011	B	C	13B
R1012	B	C	14B
R1013	B	C	13B
R1014	B	C	13B
R1015	B	C	13C
R1016	B	C	13C
R1017	B	C	13B
R1018	B	C	12B
R1019	B	C	12C
R1020	B	C	12B
R1021	B	C	12C
R1023	B	C	7B
R1025	B	C	8D
R1026	B	C	7D
R1027	B	C	8D
R1028	B	C	8E
R1029	B	C	8D
R1030	B	C	8E
R1031	B	C	8D
R1032	B	C	7D
R1035	B	C	9B
R1037	B	C	7B
R1038	B	C	10A
R1039	B	C	11B
R1045	B	C	13A
R1046	B	C	13A
R1047	B	C	12B
R1048	B	C	13B
R1049	B	C	10B
R1052	B	C	11C
R1053	B	C	8C
R1054	B	C	8D
R1055	B	C	12B
R1056	B	C	12B
R1058	B	C	7D
R1059	B	C	13B
R1060	B	C	14E
R1063	B	C	8D
R1064	B	C	7B
R1065	B	C	7B
R1066	B	C	7B
R1067	B	C	8B
R1068	B	C	7A
R1069	B	C	8B
R1201	B	C	2D
R1202	B	C	2D
R1203	B	C	2B
R1204	B	C	2B
R1205	B	C	2C
R1206	B	C	2B
R1207	B	C	2C
R1208	B	C	3C
R1209	B	C	4B
R1210	B	C	4B
R1211	B	C	4C
R1212	B	C	5C
R1213	B	C	4C
R1216	B	C	5D
R1218	B	C	5D
R1219	B	C	5E
R1220	B	C	5E
R1221	B	C	4E
R1222	B	C	4E
R1223	B	C	4E
R1224	B	C	3E
R1225	B	C	3E
R1226	B	C	2E
R1227	B	C	2D
R1228	B	C	2D
R1229	B	C	3B
R1230	B	C	3B
R1231	B	C	3B
R1232	B	C	3B
R1233	B	C	1C
R1234	B	C	1D
R1235	B	C	1B
R1236	B	C	1C
R1237	B	C	1B
R1238	B	C	1B
R1239	B	C	1B
R1240	B	C	5C
R1242	B	C	4B
R1243	B	C	4B
R1244	B	C	2C
R1245	B	C	2C
R1246	B	C	5B
R1247	B	C	5B
R1248	B	C	5B
R1249	B	C	5B
R1250	B	C	6D
R1251	B	C	6C
R1253	B	C	6D
R1255	B	C	6C
R1256	B	C	6C
R1257	B	C	5D
R1259	B	C	3C
R1260	B	C	2B
R1261	B	C	2C
R1262	B	C	2C
R1263	B	C	3B
R1264	B	C	2B
R1265	B	C	6B
OTHER			
TP1001	A	D	8E
VR1001	A	D	9D
VR1002	A	D	14E
VR1201	A	D	4C
LC1201	A	D	6B

4.15 2D SVHS CIRCUIT BOARD (VSH 2050)

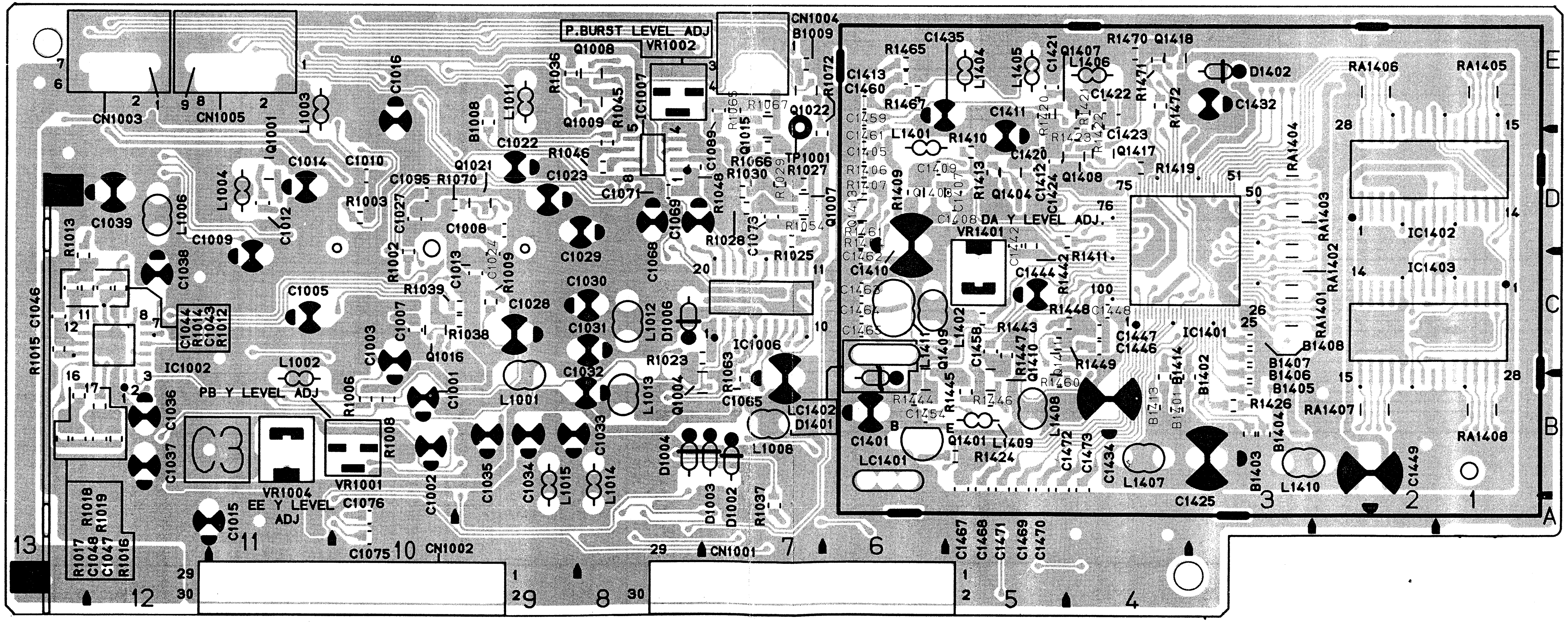

LPB10019-001A 2D SVHS PWB
TP1001 P.BURST LEVEL
VR1001 VCA GAIN
VR1002 P.BURST LEVEL
VR1201 Y LEVEL ADJ
IC1201
IC1001
IC1002
IC1006
IC1007
CN1001
CN1002
CN1003
CN1004
CN1005
LC1201
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14

4.16 3D SVHS CIRCUIT BOARD (VSH 2080)

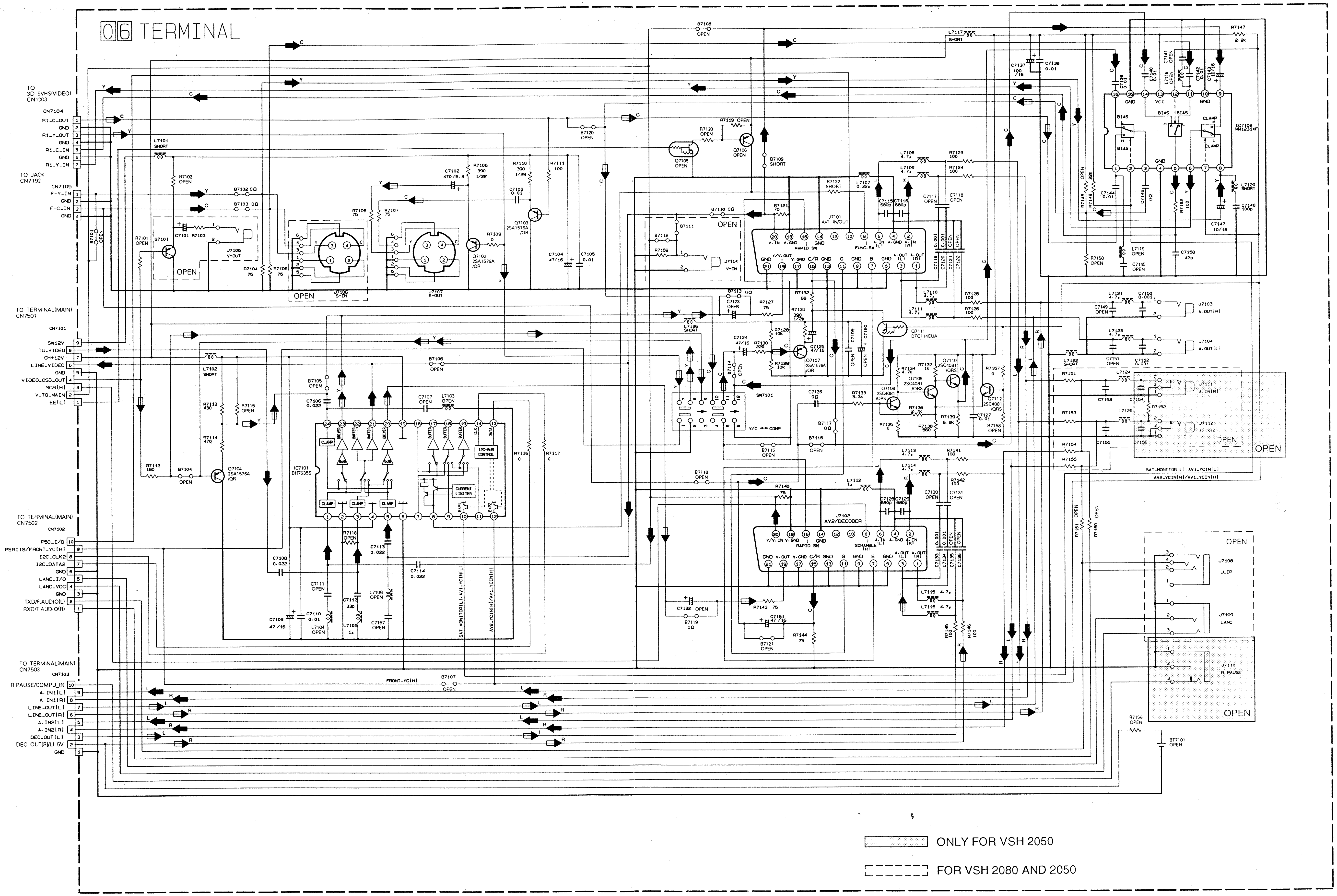
— FOIL SIDE (B) —


P.BURST LEVEL ADJ
CN1004
VR1002
TP1001
CN1005
CN1003
IC1001
VR1401
DA Y
LEVEL ADJ.
VR1004
EE Y LEVEL
ADJ
VR1001
PB Y LEVEL ADJ
UL MARK
LPB10033 -002C
3D SVHS PWB
05 3D SVHS PWB ASS'Y
LPA10033
CN1001
CN1002
LC1401
LC1402
D1401
D1402
Q1401
Q1405
L1401
L1406
C1451
C1450
C1452
C1453
B1410
B1411
B1412
R1429
R1427
R1430
R1432
A
B
C
D
E
1
2
3
4
5
6
7
8
9
10
11
12
13

— COMPONENT SIDE (A) —


P.BURST LEVEL ADJ
Q1008
VR1002
CN1004
B1009
CN1003
CN1005
TP1001
IC1002
IC1006
IC1401
IC1402
IC1403
DA Y LEVEL ADJ.
VR1401
PB Y LEVEL ADJ
VR1004
EE Y LEVEL
ADJ
VR1001
CN1002
CN1001
RA1401
RA1402
RA1403
RA1404
RA1405
RA1406
RA1407
RA1408
LC1401
LC1402
D1401
D1402
C3
A
B
C
D
E
1
2
3
4
5
6
7
8
10
11
12
13

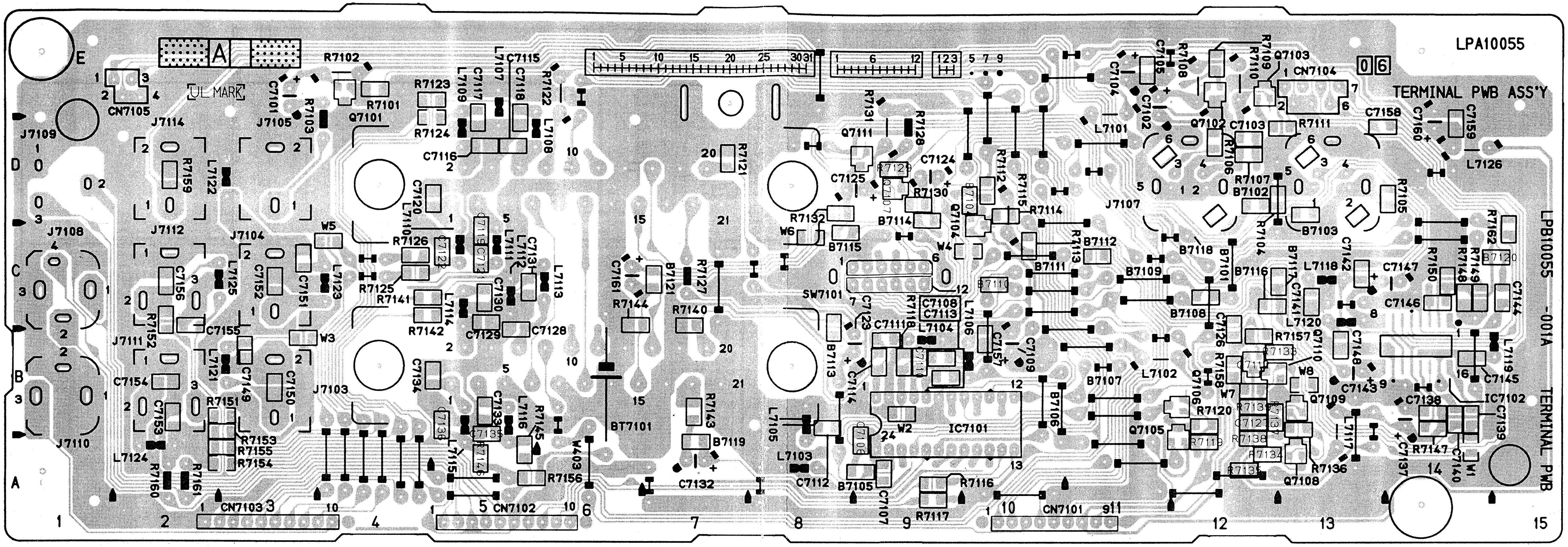
4.17 TERMINAL SCHEMATIC DIAGRAM


06 TERMINAL
TO 3D SVHS(VIDEO) CN1003
CN7104
R1_C_OUT
GND
R1_Y_OUT
GND
R1_C_IN
GND
R1_Y_IN
TO JACK CN7192
CN7105
F-Y_IN
GND
F-C_IN
GND
TO TERMINAL(MAIN) CN7501
CN7101
SW12V
TU_VIDEO
CH+12V
LINE_VIDEO
GND
VIDEO_OSD_OUT
SCR(H)
V_TO_MAIN
EE(L)
TO TERMINAL(MAIN) CN7502
CN7102
P50_I/O
PERI1S/FRONT_YC(H)
I2C_CLK2
I2C_DATA2
GND
LANC_I/O
LANC_VCC
GND
TXD/F.AUDIO(L)
RXD/F.AUDIO(R)
TO TERMINAL(MAIN) CN7503
CN7103
R.PAUSE/COMPU_IN
A.IN1(L)
A.IN1(R)
LINE_OUT(L)
LINE_OUT(R)
A.IN2(L)
A.IN2(R)
DEC_OUT(L)
DEC_OUT(R)/LI_5V
GND
J7106 S-IN
J7107 S-OUT
IC7101 BH7635S
J7101 AV1 IN/OUT
J7102 AV2/DECODER
IC7102 MM1231XF
SW7101
Y/C ⟷ COMP
J7103 A.OUT(R)
J7104 A.OUT(L)
J7111 A.IN(R)
J7112 A.IN(L)
J7108 JLIP
J7109 LANC
J7110 R.PAUSE
BT7101 OPEN
SAT_MONITOR(L)/AV1_YCIN(L)
AV2_YCIN(H)/AV1_YCIN(H)
FRONT_YC(H)
OPEN

▨ ONLY FOR VSH 2050

┌ ─ ─ ┐ FOR VSH 2080 AND 2050

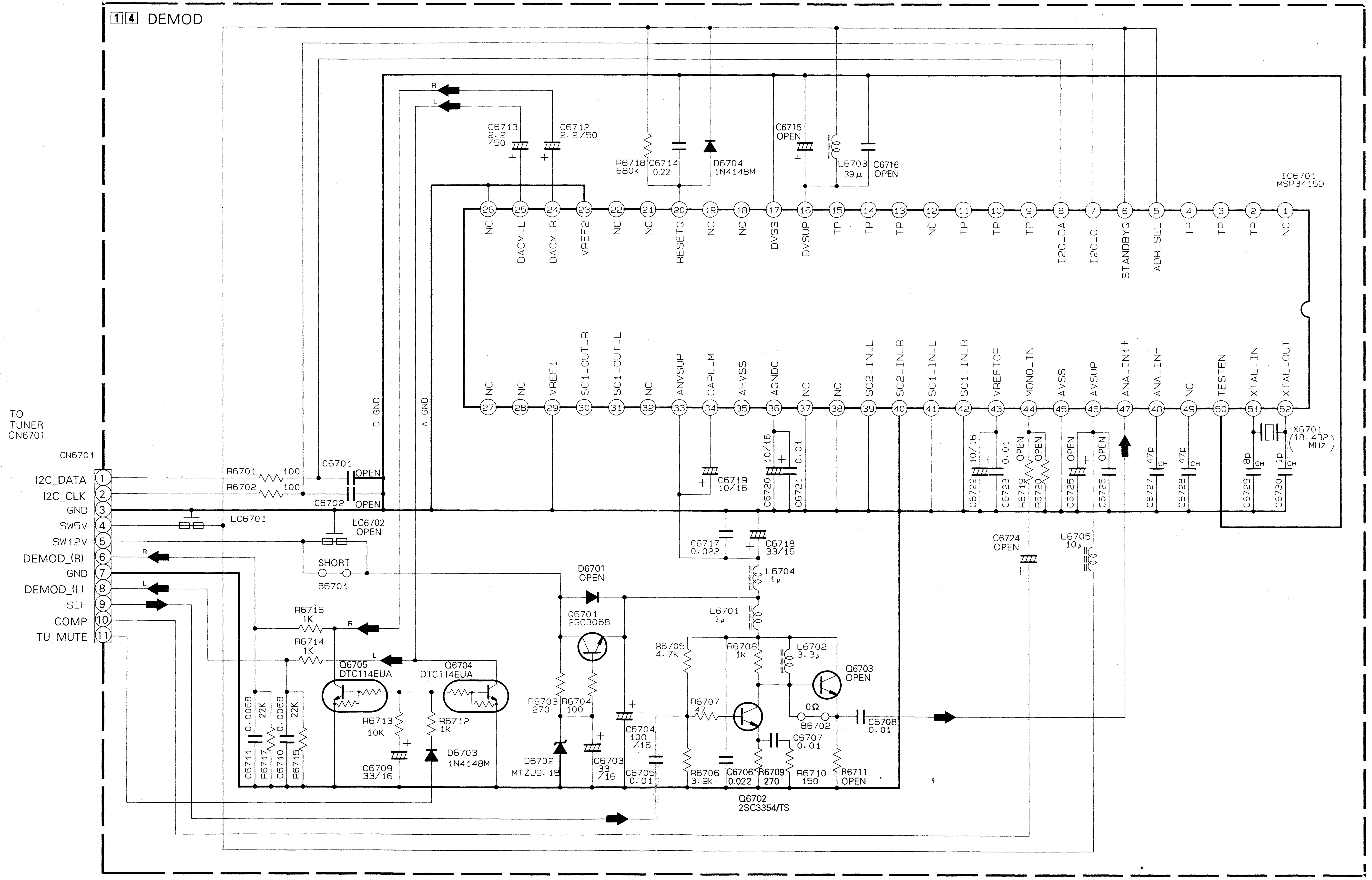
4.18 TERMINAL CIRCUIT BOARD


LPA10055
TERMINAL PWB ASS'Y
LPB10055 -001A TERMINAL PWB
UL MARK
A
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
CN7101
CN7102
CN7103
CN7104
CN7105
IC7101
IC7102
BT7101
SW7101
J7103
J7104
J7105
J7107
J7108
J7109
J7110
J7111
J7112
J7114
Q7101
Q7102
Q7103
Q7105
Q7106
Q7108
Q7109
Q7111
W1
W2
W3
W4
W5
W6
W7
W8

COMPONENT PARTS LOCATION GUIDE <TERMINAL>

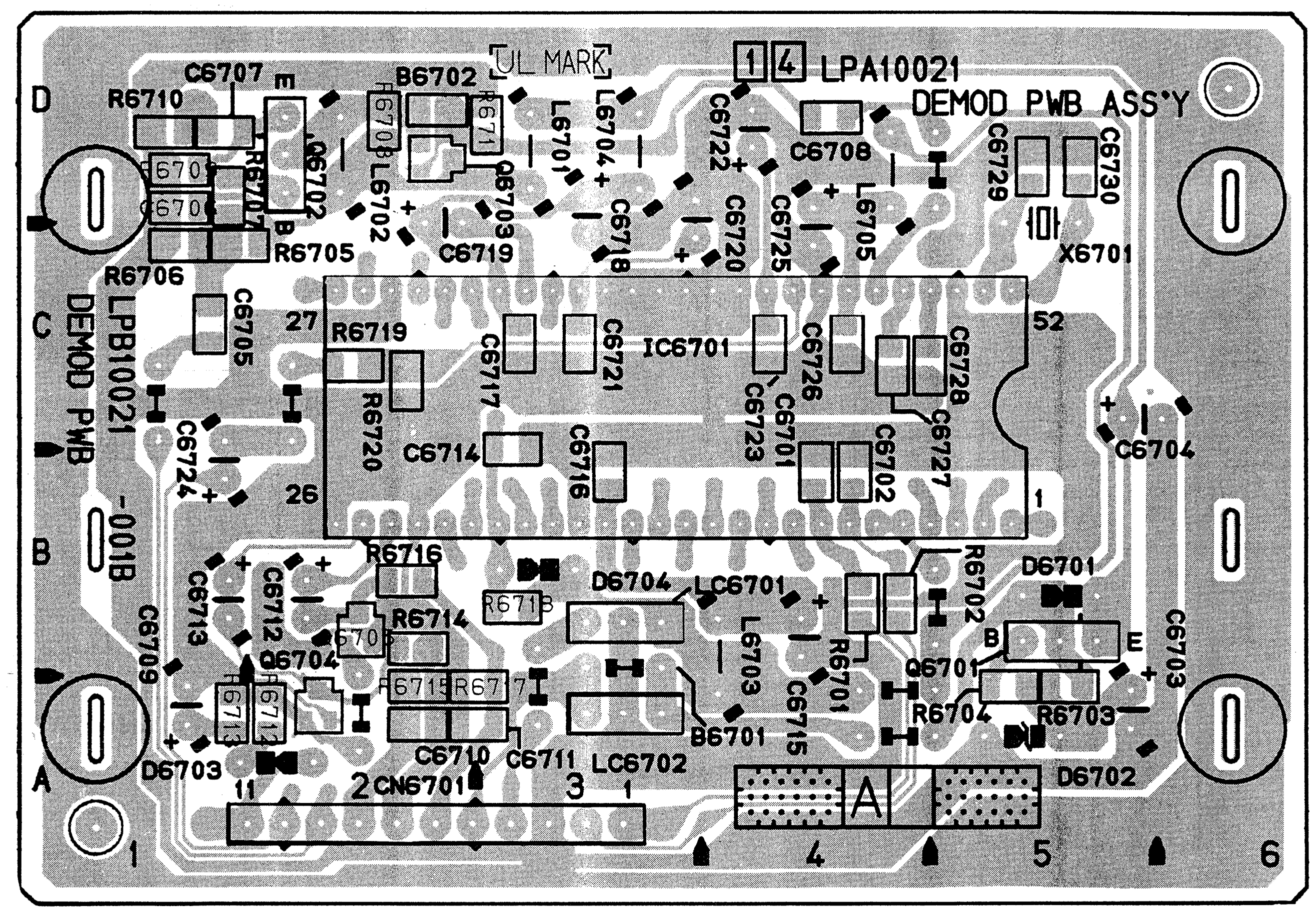
REF.NO.	LOCATION		
CAPACITOR			
C7101	A	D	3E
C7102	A	D	11E
C7103	B	C	12D
C7104	A	D	11E
C7105	B	C	11E
C7106	B	C	9A
C7107	B	C	9A
C7108	B	C	9B
C7109	A	D	10B
C7110	B	C	9B
C7111	B	C	9B
C7112	B	C	8B
C7113	B	C	9B
C7114	B	C	9B
C7115	B	C	5D
C7116	B	C	5D
C7117	B	C	5E
C7118	B	C	5E
C7119	B	C	5C
C7120	B	C	5D
C7121	B	C	5C
C7122	B	C	5C
C7123	A	D	9B
C7124	A	D	9D
C7125	A	D	9D
C7126	B	C	12C
C7127	B	C	12B
C7128	B	C	5C
C7129	B	C	5C
C7130	B	C	5C
C7131	B	C	5C
C7132	A	D	7A
C7133	B	C	5B
C7134	B	C	5B
C7135	B	C	5B
C7136	B	C	5B
C7137	A	D	14B
C7138	B	C	14B
C7139	B	C	14B
C7140	B	C	14B
C7141	B	C	13C
C7142	B	C	13C
C7143	A	D	13B
C7144	B	C	15C
C7145	B	C	14B
C7146	B	C	14C
C7147	A	D	13C
C7148	B	C	13B
C7149	B	C	3B
C7150	B	C	3B
C7151	B	C	3C
C7152	B	C	3C
C7153	B	C	2B
C7154	B	C	2B
C7155	B	C	2C
C7156	B	C	2C
C7157	B	C	10B
C7158	B	C	13D
C7159	B	C	14D
C7160	A	D	14D
C7161	A	D	6C
CONNECTOR			
CN7101	A	D	10A
CN7102	A	D	5A
CN7103	A	D	2A
CN7104	A	D	13E
CN7105	A	D	2E
IC			
IC7101	A	D	9B
IC7102	B	C	14B
JACK			
J7101	A	D	6D
J7102	A	D	6B
J7103	A	D	3B
J7104	A	D	3C
J7105	A	D	3D
J7106	A	D	13D
J7107	A	D	12D
J7108	A	D	1C
J7109	A	D	1D
J7110	A	D	1B
J7111	A	D	2B
J7112	A	D	2C
J7114	A	D	2D
COIL			
L7101	A	D	11E
L7102	A	D	12B
L7103	A	D	8A
L7104	A	D	9B
L7105	A	D	8A
L7106	A	D	10B
L7107	A	D	5E
L7108	A	D	5D
L7109	A	D	5D
L7110	A	D	5C
L7111	A	D	5C
L7112	A	D	5C
L7113	A	D	6C
L7114	A	D	5C
L7115	A	D	5B
L7116	A	D	5B
L7117	A	D	13A
L7118	A	D	13C
L7119	A	D	15B
L7120	A	D	13C
L7121	A	D	3B
L7122	A	D	3D
L7123	A	D	4C
L7124	A	D	2A
L7125	A	D	3C
L7126	A	D	14D
TRANSISTOR			
Q7101	B	C	4E
Q7102	B	C	12E
Q7103	B	C	12E
Q7104	B	C	10D
Q7105	B	C	12B
Q7106	B	C	12B
Q7107	B	C	9D
Q7108	B	C	13A
Q7109	B	C	13B
Q7110	B	C	12B
Q7111	B	C	9D
Q7112	B	C	12B
RESISTOR			
R7101	B	C	4E
R7102	A	D	3E
R7103	A	D	3E
R7104	B	C	12D
R7105	B	C	14D
R7106	B	C	12D
R7107	B	C	12D
R7108	A	D	12E
R7109	B	C	12E
R7110	A	D	12E
R7111	B	C	13D
R7112	B	C	10D
R7113	B	C	10C
R7114	B	C	10D
R7115	A	D	10C
R7116	B	C	9A
R7117	B	C	9A
R7118	B	C	9B
R7119	B	C	12A
R7120	B	C	12B
R7121	B	C	7D
R7122	A	D	6E
R7123	B	C	5E
R7124	B	C	5E
R7125	B	C	4C
R7126	B	C	4C
R7127	A	D	7C
R7128	A	D	9E
R7129	B	C	9D
R7130	B	C	9D
R7131	A	D	9D
R7132	B	C	8D
R7133	B	C	13B
R7134	B	C	12A
R7135	B	C	12A
R7136	B	C	13B
R7137	B	C	12B
R7138	B	C	12A
R7139	B	C	12B
R7140	B	C	7C
R7141	B	C	4C
R7142	B	C	4C
R7143	B	C	7B
R7144	B	C	6C
R7145	B	C	5A
R7146	B	C	5A
R7147	B	C	14B
R7148	B	C	14C
R7149	B	C	14C
R7150	B	C	14C
R7151	B	C	3B
R7152	B	C	2C
R7153	B	C	3B
R7154	B	C	3A
R7155	B	C	3A
R7156	B	C	5A
R7157	B	C	12B
R7158	B	C	12B
R7159	B	C	2D
R7160	A	D	2A
R7161	A	D	2A
R7162	B	C	15C
OTHER			
BT7101	A	D	6B
SW7101	A	D	9C

4.19 DEMODULATOR SCHEMATIC DIAGRAM



14 DEMOD
TO TUNER CN6701
CN6701
I2C_DATA 1
I2C_CLK 2
GND 3
SW5V 4
SW12V 5
DEMOD_(R) 6
GND 7
DEMOD_(L) 8
SIF 9
COMP 10
TU_MUTE 11
R6701 100
R6702 100
C6701 OPEN
C6702 OPEN
LC6701
LC6702 OPEN
SHORT
B6701
D GND
A GND
C6713 2.2/50
C6712 2.2/50
R6718 680K
C6714 0.22
D6704 1N4148M
C6715 OPEN
L6703 39µ
C6716 OPEN
IC6701 MSP3415D
NC
DACM_L
DACM_R
VREF2
RESETQ
DVSS
DVSUP
TP
I2C_DA
I2C_CL
STANDBYQ
ADR_SEL
VREF1
SC1_OUT_R
SC1_OUT_L
ANVSUP
CAPL_M
AHVSS
AGNDC
SC2_IN_L
SC2_IN_R
SC1_IN_L
SC1_IN_R
VREFTOP
MONO_IN
AVSS
AVSUP
ANA_IN1+
ANA_IN-
TESTEN
XTAL_IN
XTAL_OUT
C6719 10/16
C6720 10/16
C6721 0.01
C6722 10/16
C6723 0.01
R6719 OPEN
R6720 OPEN
C6725 OPEN
C6726 OPEN
C6727 47p CH
C6728 47p CH
C6729 8p CH
C6730 1p CH
X6701 (18.432 MHz)
C6717 0.022
C6718 33/16
C6724 OPEN
L6705 10µ
L6704 1µ
L6701 1µ
D6701 OPEN
Q6701 2SC3068
R6716 1K
R6714 1K
Q6705 DTC114EUA
Q6704 DTC114EUA
R6713 10K
R6712 1k
C6709 33/16
D6703 1N4148M
C6711 0.0068
R6717 22K
C6710 0.0068
R6715 22K
R6703 270
R6704 100
D6702 MTZJ9.1B
C6703 33/16
C6704 100/16
C6705 0.01
R6705 4.7k
R6708 1k
L6702 3.3µ
Q6703 OPEN
R6707 47
0Ω
B6702
C6707 0.01
C6708 0.01
R6706 3.9k
C6706 0.022
R6709 270
R6710 150
R6711 OPEN
Q6702 2SC3354/TS
R
L

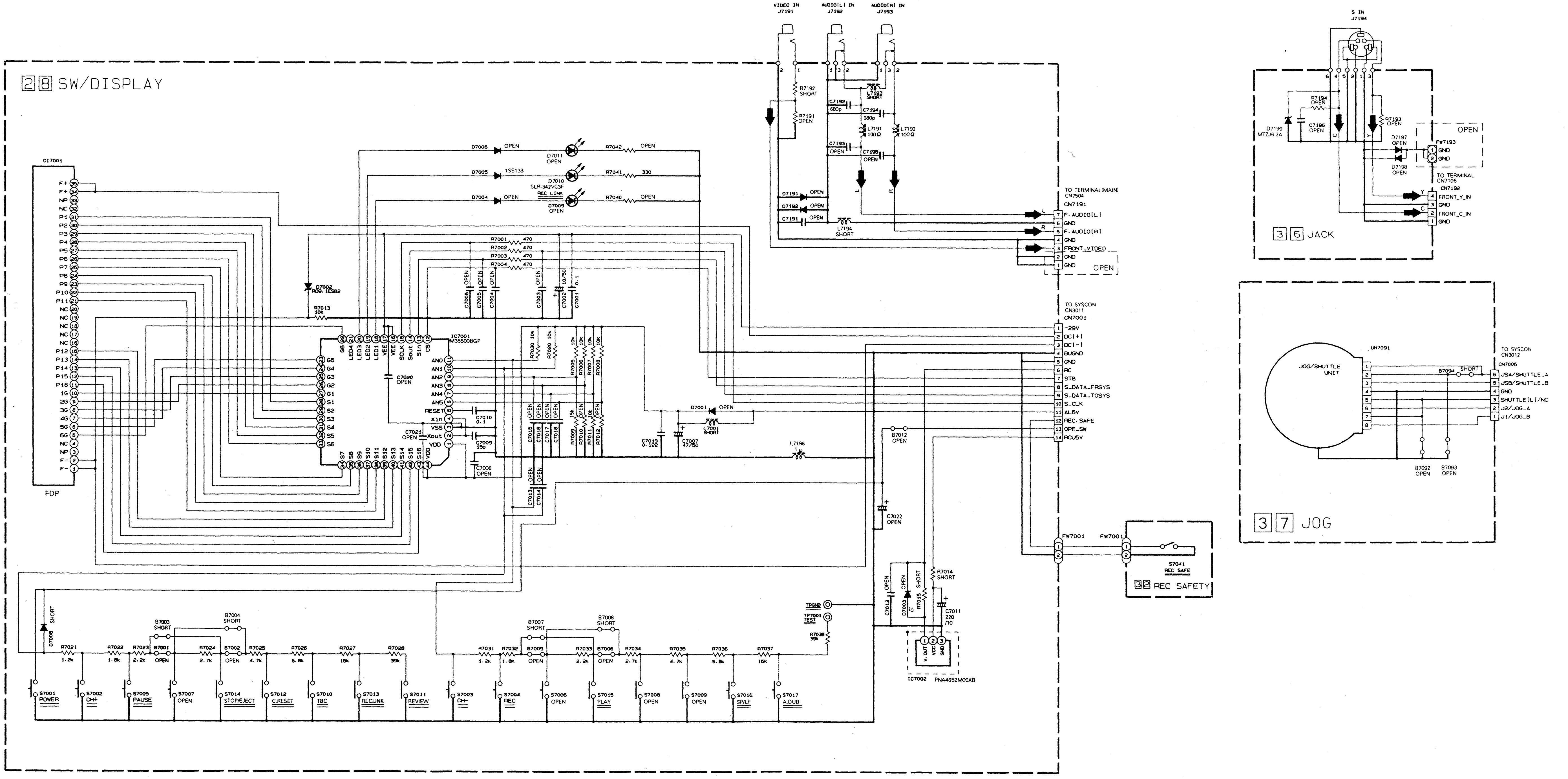
4.20 DEMODULATOR CIRCUIT BOARD


D
C
B
A
1
2
3
4
5
6
UL MARK
14
LPA10021
DEMOD PWB ASS'Y
LPB10021
DEMOD PWB
-001B
C6707
R6710
B6702
R6709
R6708
R6707
R6706
R6705
Q6702
Q6703
L6702
L6701
L6704
C6722
C6708
C6729
C6730
C6719
C6718
C6720
C6725
L6705
X6701
C6705
27
R6719
C6717
C6721
IC6701
C6726
C6701
C6723
C6728
C6727
52
R6720
C6714
C6716
C6702
C6724
26
1
C6704
R6716
D6704
LC6701
R6702
D6701
C6713
C6712
R6714
R6718
Q6705
Q6704
L6703
R6701
C6715
Q6701
B
E
C6703
C6709
R6715
R6717
B6701
R6704
R6703
D6703
C6710
C6711
LC6702
CN6701
D6702
11
A

COMPONENT PARTS LOCATION GUIDE <DEMODULATOR>

REF.NO.	LOCATION		
CAPACITOR			
C6701	B	C	4B
C6702	B	C	4B
C6703	A	D	5A
C6704	A	D	5C
C6705	B	C	1C
C6706	B	C	1D
C6707	B	C	1D
C6708	B	C	4D
C6709	A	D	1A
C6710	B	C	2A
C6711	B	C	3A
C6712	A	D	2B
C6713	A	D	1B
C6714	B	C	3C
C6715	A	D	4B
C6716	B	C	3B
C6717	B	C	3C
C6718	A	D	3D
C6719	A	D	2D
C6720	A	D	4C
C6721	B	C	3C
C6722	A	D	4D
C6723	B	C	4C
C6724	A	D	1B
C6725	A	D	4D
C6726	B	C	4C
C6727	B	C	4C
C6728	B	C	5C
C6729	B	C	5D
C6730	B	C	5D
CONNECTOR			
CN6701	A	D	3A
DIODE			
D6701	A	D	5B
D6702	A	D	5A
D6703	A	D	2A
D6704	A	D	3B
IC			
IC6701	A	D	5B
COIL			
L6701	A	D	3D
L6702	A	D	2D
L6703	A	D	4A
L6704	A	D	3D
L6705	A	D	4D
TRANSISTOR			
Q6701	A	D	5B
Q6702	A	D	2D
Q6703	B	C	2D
Q6704	B	C	2A
Q6705	B	C	2B
RESISTOR			
R6701	B	C	4B
R6702	B	C	4B
R6703	B	C	5A
R6704	B	C	5A
R6705	B	C	2C
R6706	B	C	1C
R6707	B	C	1D
R6708	B	C	2D
R6709	B	C	1D
R6710	B	C	1D
R6711	B	C	3D
R6712	B	C	2A
R6713	B	C	2A
R6714	B	C	2B
R6715	B	C	2A
R6716	B	C	2B
R6717	B	C	3A
R6718	B	C	3B
R6719	B	C	2C
R6720	B	C	2C
OTHER			
LC6701	A	D	3B
LC6702	A	D	3A

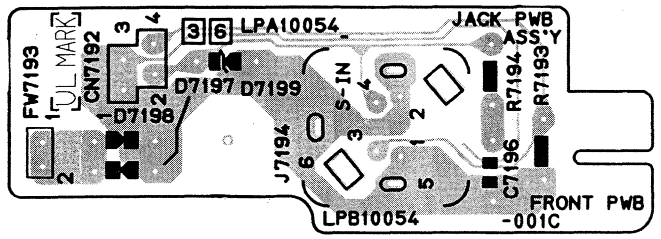
4.21 SWITCH/DISPLAY, REC SAFETY, JACK AND JOG SCHEMATIC DIAGRAMS



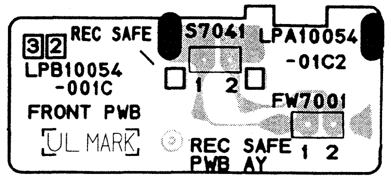
28 SW/DISPLAY
DI7001
FDP
IC7001 M35500BGP
VIDEO IN J7191
AUDIO(L) IN J7192
AUDIO(R) IN J7193
TO TERMINAL(MAIN) CN7504
CN7191
F.AUDIO(L)
GND
F.AUDIO(R)
FRONT_VIDEO
OPEN
TO SYSCON CN3011
CN7001
-29V
DC(+)
DC(-)
BUGND
RC
STB
S.DATA_FRSYS
S.DATA_TOSYS
S.CLK
AL5V
REC.SAFE
OPE_SW
RCU5V
D7005 1SS133
D7010 SLR-342VC3F REC LINK
IC7002 PNA4652M00XB
TPGND
TP7001 TEST
S7001 POWER
S7002 CH+
S7005 PAUSE
S7007 OPEN
S7014 STOP/EJECT
S7012 C.RESET
S7010 TBC
S7013 REC/LINK
S7011 REVIEW
S7003 CH-
S7004 REC
S7006 OPEN
S7015 PLAY
S7008 OPEN
S7009 OPEN
S7016 SP/LP
S7017 A.DUB
S IN J7194
D7199 MTZJ6.2A
FW7193
TO TERMINAL CN7105
CN7192
FRONT_Y_IN
FRONT_C_IN
36 JACK
UN7091
JOG/SHUTTLE UNIT
TO SYSCON CN3012
CN7005
JSA/SHUTTLE_A
JSB/SHUTTLE_B
GND
SHUTTLE(L)/NC
J2/JOG_A
J1/JOG_B
37 JOG
FW7001
S7041 REC SAFE
38 REC SAFETY

4.22 SWITCH/DISPLAY, REC SAFETY, JACK AND JOG CIRCUIT BOARDS

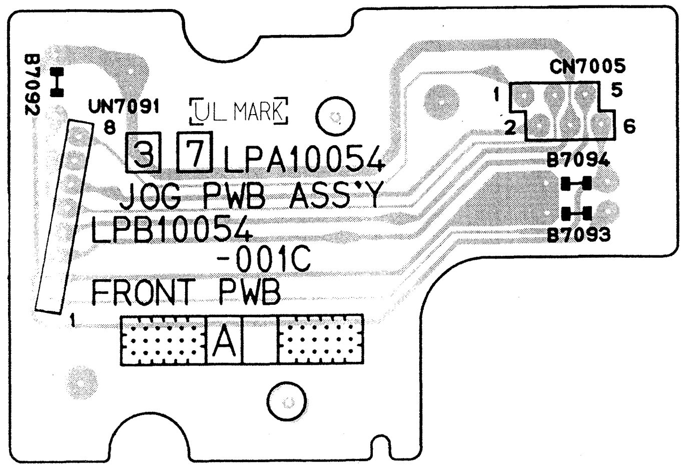
— JACK —


FW7193
CN7192
UL MARK
3 4
1 2
3 6 LPA10054
JACK PWB ASS'Y
D7197 D7199
D7198
S-IN
J7194
R7194
R7193
C7196
LPB10054
FRONT PWB -001C

— REC SAFETY —


3 2 REC SAFE
LPB10054 -001C
FRONT PWB
UL MARK
S7041
1 2
LPA10054 -01C2
FW7001
REC SAFE PWB AY
1 2

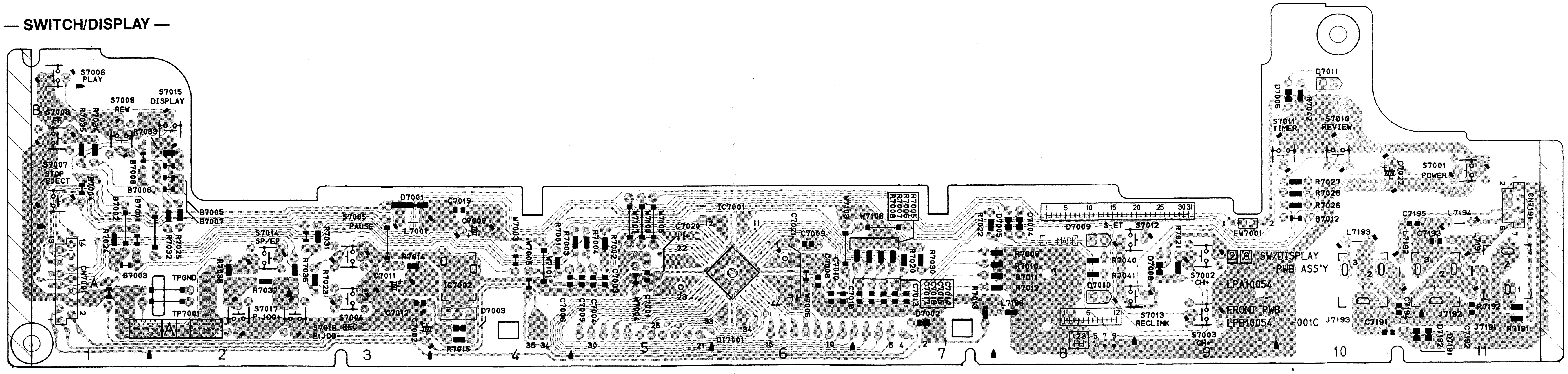
— JOG —


B7092
UN7091
8
UL MARK
3 7 LPA10054
JOG PWB ASS'Y
LPB10054 -001C
FRONT PWB
1
A
CN7005
1 5
2 6
B7094
B7093

COMPONENT PARTS LOCATION GUIDE <SW/DISPLAY>

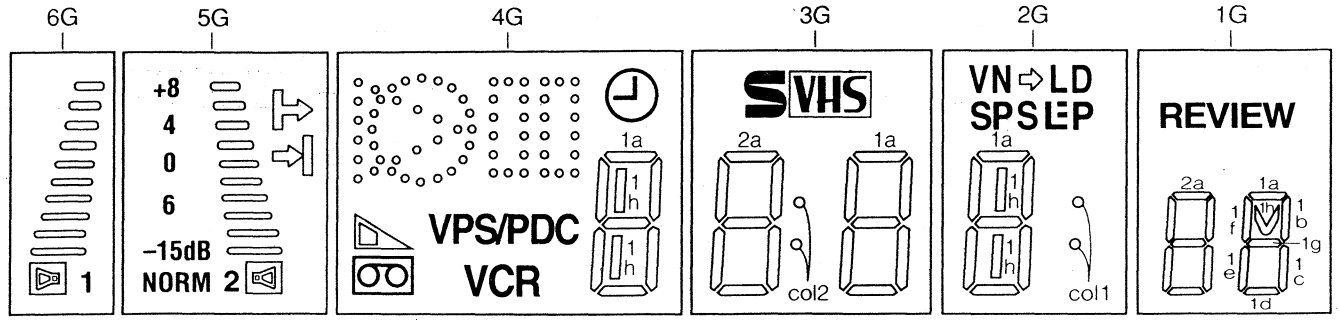
REF.NO.	LOCATION		
CAPACITOR			
C7001	A	D	5A
C7002	A	D	3A
C7003	A	D	5A
C7004	A	D	5A
C7005	A	D	5A
C7006	A	D	4A
C7007	A	D	4A
C7008	A	D	6A
C7009	A	D	6A
C7010	A	D	6A
C7011	A	D	3A
C7012	A	D	3A
C7013	A	D	7A
C7014	A	D	7A
C7015	A	D	7A
C7016	A	D	7A
C7017	A	D	7A
C7018	A	D	6A
C7019	A	D	4B
C7020	A	D	5A
C7021	A	D	6A
C7022	A	D	10B
C7191	A	D	10A
C7192	A	D	11A
C7193	A	D	11A
C7194	A	D	10A
C7195	A	D	11A
CONECTOR			
CN7001	A	D	1A
CN7191	A	D	11B
DIODE			
D7001	A	D	3B
D7002	A	D	7A
D7003	A	D	4A
D7004	A	D	8B
D7005	A	D	8B
D7006	A	D	10B
D7008	A	D	9A
D7009	A	D	8A
D7010	A	D	8A
D7011	A	D	10B
D7191	A	D	10A
D7192	A	D	11A
IC			
IC7001	B	C	6A
IC7002	A	D	4A
JACK			
J7191	A	D	11A
J7192	A	D	11A
J7193	A	D	10A
COIL			
L7001	A	D	9C
L7191	A	D	11A
L7192	A	D	10A
L7193	A	D	10A
L7194	A	D	11A
L7196	A	D	8A
RESISTOR			
R7001	A	D	4A
R7002	A	D	5A
R7003	A	D	5A
R7004	A	D	5A
R7005	A	D	7A
R7006	A	D	7A
R7007	A	D	7A
R7008	A	D	7A
R7009	A	D	7A
R7010	A	D	7A
R7011	A	D	7A
R7012	A	D	7A
R7013	A	D	7A
R7014	A	D	3A
R7015	A	D	4A
R7020	A	D	7A
R7021	A	D	9A
R7022	A	D	7A
R7023	A	D	3A
R7024	A	D	1A
R7025	A	D	2A
R7026	A	D	10B
R7027	A	D	10B
R7028	A	D	10B
R7030	A	D	7A
R7031	A	D	3B
R7032	A	D	2A
R7033	A	D	2B
R7034	A	D	1B
R7035	A	D	1B
R7036	A	D	3A
R7037	A	D	2A
R7038	A	D	2A
R7040	A	D	8A
R7041	A	D	8A
R7042	A	D	10B
R7191	A	D	11A
R7192	A	D	11A
SWITCH			
S7001	A	D	11B
S7002	A	D	9A
S7003	A	D	9A
S7004	A	D	3A
S7005	A	D	3A
S7006	A	D	1C
S7007	A	D	1B
S7008	A	D	1B
S7009	A	D	1B
S7010	A	D	10B
S7011	A	D	10B
S7012	A	D	8A
S7013	A	D	8A
S7014	A	D	2A
S7015	A	D	2B
S7016	A	D	3A
S7017	A	D	2A
OTHER			
DI7001	A	D	6A
FW7001	A	D	9B
TP7001	A	D	1A
TPGND	A	D	1A

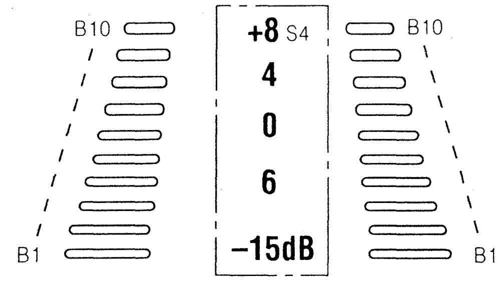
— SWITCH/DISPLAY —


S7006 PLAY
S7015 DISPLAY
S7009 REW
S7008 FF
B
R7035
R7034
R7033
B7008
S7007 STOP /EJECT
B7004
B7006
B7002
B7001
B7005
B7007
R7024
R7032
R7025
CN7001
A
B7003
TPGND
TP7001
A
S7014 SP/EP
R7031
R7036
R7038
R7037
R7023
S7017 P.JOG+
S7016 REC P.JOG-
S7004
D7001
C7019
C7007
S7005 PAUSE
L7001
R7014
C7011
IC7002
C7012
C7002
R7015
D7003
W7003
W7005
R7001
R7003
R7004
R7002
C7003
C7004
C7005
C7006
C7001
C7020
IC7001
C7021
C7009
C7008
C7010
C7018
W7108
R7005
R7006
R7007
R7008
R7030
C7013
C7014
C7015
C7016
C7017
R7013
D7002
D17001
R7022
D7005
D7004
D7009
S-ET
S7012
R7021
UL MARK
R7009
R7010
R7011
R7012
R7040
R7041
D7008
D7010
L7196
S7002 CH+
S7013 RECLINK
S7003 CH-
FW7001
2 8 SW/DISPLAY PWB ASS'Y
LPA10054
FRONT PWB
LPB10054 -001C
D7011
D7006
R7042
S7011 TIMER
S7010 REVIEW
S7001 POWER
C7022
R7027
R7028
R7026
B7012
CN7191
C7195
L7194
L7193
C7193
L7192
L7191
J7193
C7191
C7194
J7192
R7192
J7191
R7191
D7192
D7191
C7192
1
2
3
4
5
6
7
8
9
10
11

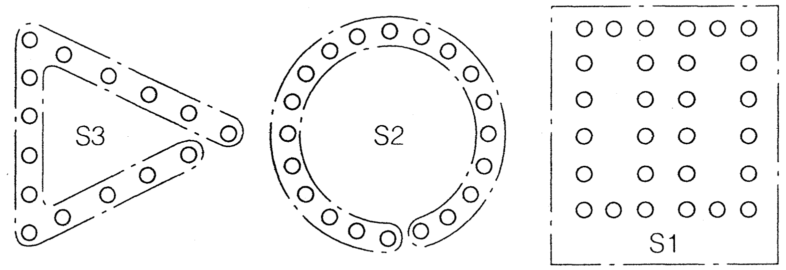
4.23 FDP GRID ASSIGNMENT AND ANODE CONNECTION (VSH 2080)

GRID ASSIGNMENT


6G
5G
4G
3G
2G
1G
1
+8
4
0
6
−15dB
NORM 2
VPS/PDC
VCR
1a
1h
S VHS
2a
1a
col2
VN⇨LD
SP S LP
1a
1h
col1
REVIEW
2a
1a
1h
1
f
1
b
1g
1
e
1
c
1d


B10
+8 S4
4
0
6
−15dB
B10
B1
B1

(6G, 5G)



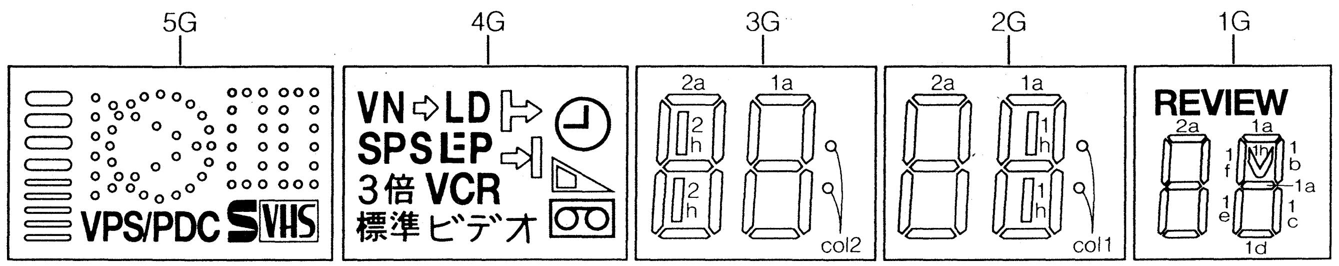
(4G)

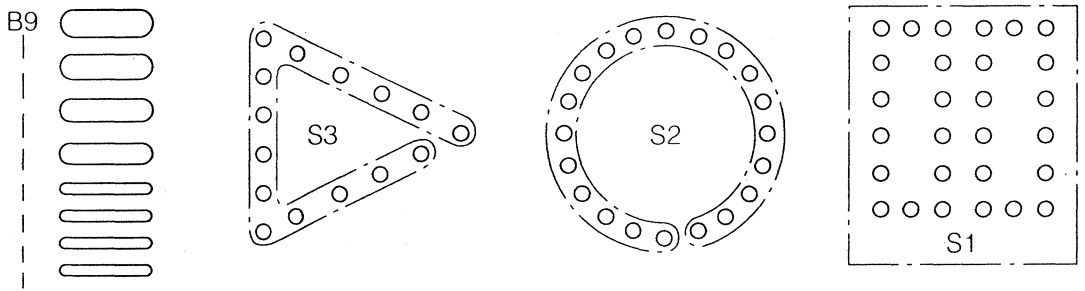
ANODE CONNECTION

	6G	5G	4G	3G	2G	1G
P 1	—	↳	S2	1a	1a	1a
P 2	—	⇥	S1	1b	1b	1b
P 3	—	S4	S3	1f	1f	1f
P 4	—	NORM	VPS/PDC	1g	1g	1g
P 5	1	2	◷	1c	1c	1c
P 6	▷	◁	◺	1e	1e	1e
P 7	B10	B10	OO	1d	1d	1d
P 8	B9	B9	VCR	col2	1h	1h
P 9	B8	B8	1a	2a	col1	2a
P10	B7	B7	1b	2b	⇨	2b
P11	B6	B6	1f	2f	VN	2f
P12	B5	B5	1g	2g	LD	2g
P13	B4	B4	1c	2c	SP	2c
P14	B3	B3	1e	2e	S (SEP)	2e
P15	B2	B2	1d	2d	: (SEP)	2d
P16	B1	B1	1h	S VHS	LP(SEP)	REVIEW

4.24 FDP GRID ASSIGNMENT AND ANODE CONNECTION (VSH 2050)

GRID ASSIGNMENT


5G
4G
3G
2G
1G
VPS/PDC
S VHS
VN⇨LD
SP S LP
3倍 VCR
標準 ビデオ
2a
1a
2
h
col2
2a
1a
1
h
col1
REVIEW
2a
1a
1
f
1
b
1a
1
e
1
c
1d


B9
B1
S3
S2
S1

(5G)

ANODE CONNECTION

	5G	4G	3G	2G	1G
P 1	S2	↳	1a	1a	1a
P 2	S1	⇥	1b	1b	1b
P 3	S3	3倍	1f	1f	1f
P 4	VPS/PDC	標準	1g	1g	1g
P 5	S VHS	◷	1c	1c	1c
P 6	—	◺	1e	1e	1e
P 7	—	OO	1d	1d	1d
P 8	B9	VCR	col2	1h	1h
P 9	B8	ビデオ	2a	2a	2a
P10	B7	⇨	2b	2b	2b
P11	B6	VN	2f	2f	2f
P12	B5	LD	2g	2g	2g
P13	B4	SP	2c	2c	2c
P14	B3	S (SEP)	2e	2e	2e
P15	B2	: (SEP)	2d	2d	2d
P16	B1	LP(SEP)	2h	col1	REVIEW

4.25 VOLTAGE CHARTS (VSH 2080)

<VIDEO/N.AUDIO>

MODE PIN NO.	REC	PLAY
IC1		
1	2.5	2.5
2	2.5	2.5
3	0	0
4	2.5	2.5
5	0	0
6	2.8	2.8
7	2.5	2.5
8	2.5	2.5
9	2.5	2.5
10	2.5	2.5
11	2.5	2.5
12	5.0	5.0
13	1.9	1.4
14	1.9	1.4
15	2.6	3.0
16	1.5	0.7
17	1.8	1.8
18	2.3	2.3
19	3.1	3.1
20	2.7	2.7
21	2.3	2.3
22	1.9	1.9
23	3.0	3.0
24	2.2	2.2
25	1.4	1.4
26	2.1	2.1
27	0	0
28	4.9	4.9
29	1.6	1.9
30	3.0	3.0
31	2.8	2.8
32	0	0
33	0	0
34	0	0
35	3.0	3.0
36	5.0	5.0
37	0	0
38	5.0	5.0
39	3.3	3.3
40	5.0	5.0
41	5.0	5.0
42	1.9	1.9
43	5.0	5.0
44	2.5	2.5
45	0	0
46	2.0	2.0
47	0	0
48	0	0
49	0	0
50	0.4	0.4
51	0	0
52	1.3	2.4
53	3.0	2.8
54	1.9	1.9
55	2.1	2.1
56	2.8	2.3
57	0	0
58	3.0	3.0
59	3.3	3.3
60	2.1	2.1
61	4.9	4.9
62	4.9	4.9
63	4.9	4.9
64	0	0
65	0.9	2.6
66	4.9	4.9
67	4.9	4.9
68	0	0
69	2.8	2.8
70	2.7	2.7
71	2.1	2.1
72	2.3	2.1
73	-	-
74	2.7	1.1
75	-	-
76	2.3	2.3
77	4.5	4.5
78	2.7	2.7
79	4.3	2.1
80	0	0
81	-	-
82	1.2	1.2
83	2.3	2.3
84	0	1.3
85	0	0
86	2.3	2.3
87	2.2	2.2
88	2.3	2.3
89	2.3	2.3
90	4.9	4.9
91	0	0
92	0	0
93	0	0
94	0	0
95	0.5	0.5
96	5.0	5.0
97	0.3	0
98	5.0	5.0
99	0.5	2.5
100	2.5	2.5
IC2		
1	2.7	2.7
2	0	0
3	2.7	2.7
4	4.9	0
5	2.7	2.7
6	5.0	5.0
7	2.0	2.0
8	0	0
Q1		
E	3.4	3.4
C	0	0
B	2.7	2.7
Q6		
E	2.7	2.7
C	0	0
B	2.1	2.1
Q13		
E	1.1	1.1
C	3.9	3.9
B	1.7	1.7
Q14		
E	3.2	3.2
C	4.9	4.9
B	3.9	3.9
Q15		
E	3.8	3.8
C	0	0
B	3.2	3.2
Q16		
E	4.9	4.9
C	4.9	0
B	0.2	5.0
Q17		
E	0	0
C	0	0
B	3.0	3.0
Q18		
E	0	0
C	0	0
B	3.0	3.0
Q34		
E	2.4	2.2
C	2.3	2.3
B	0	0
Q35		
E	2.3	2.3
C	2.2	2.2
B	0	0
Q36		
E	0	0
C	0	0
B	0.7	0.7
Q37		
E	0	0
C	0	0
B	0.7	0.7
Q47		
E	4.9	4.9
C	2.3	2.3
B	2.8	2.8
Q48		
E	1.9	1.9
C	0	0
B	1.0	1.0
Q49		
E	2.1	2.1
C	4.9	4.9
B	2.8	2.8
Q55		
E	0	0
C	0	0
B	3.0	3.0
Q152		
E	5.0	2.7
C	0	0
B	4.5	2.1
Q153		
E	2.1	2.1
C	4.9	4.9
B	2.7	2.7
Q2001		
E	-19.0	0
C	0	0
B	-25.3	0.7
Q2002		
E	-19.0	0
C	0	0
B	-24.9	0.7
Q2003		
E	5.0	5.0
C	-25.1	4.9
B	5.0	0
Q2051		
E	0	0
C	8.1	0.2
B	0	0.2
Q2052		
E	11.5	11.5
C	11.3	1.1
B	10.7	11.5
Q2053		
E	0	0
C	0	11.4
B	4.5	0
Q2054		
E	11.3	1.1
C	11.2	0
B	10.5	1.1
Q2055		
E	0	0
C	0	1.1
B	5.0	0
Q2061		
E	0	0
C	7.9	0.2
B	0	0.2
Q2062		
E	11.2	0
C	11.1	0.2
B	10.4	0
Q2063		
E	0	0
C	0	0
B	5.0	0
CN1		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.3	2.3
6	2.3	2.3
7	2.2	2.2
8	2.4	2.2
9	2.5	0
10	2.5	0
11	2.5	0
CN101		
1	0	0
2	-	-
3	4.8	4.8
4	-	-
5	4.9	4.9
6	0	0
7	0	0
8	0	0
9	0.5	0
10	0	0
11	0	0
12	0	0
13	5.0	5.0
14	4.9	4.9
15	0	0
16	0	0
17	0.4	0.4
18	0	0
19	3.4	3.4
20	0	0
21	0	0
22	2.1	2.1
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
CN102		
1	1.4	1.1
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1.4	1.1
8	1.9	1.9
9	1.3	2.3
10	5.0	5.0
11	2.4	2.4
12	2.9	2.9
13	0	0
14	0	0
15	2.3	2.3
16	0	0
17	4.9	4.9
18	4.9	4.9
19	4.9	4.9
20	5.0	5.0
21	2.3	2.3
22	0	0
23	2.3	2.3
24	0	0
25	0	0
26	2.4	2.4
27	1.8	1.8
28	0	0
29	0	0
30	0	0
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	2.2	2.5
7	2.5	2.5
CN2002		
1	0	0
2	0	0

<ON SCREEN>

MODE PIN NO.	REC	PLAY
IC201		
1	0	0
2	2.7	2.7
3	5.0	5.0
4	0	0
5	4.7	4.7
6	2.5	2.5
7	2.5	2.5
8	5.0	5.0
9	3.0	3.0
10	4.5	4.5
11	1.2	1.2
12	5.0	5.0
13	2.9	2.9
14	2.9	2.9
15	0	0
16	1.2	1.2
17	0	0
18	5.0	5.0
19	2.3	2.3
20	0	0
21	2.3	2.3
22	0.5	0.5
23	5.0	5.0
24	2.9	2.9
25	2.5	2.5
26	5.0	5.0
27	4.7	4.7
28	3.7	3.7
29	5.0	5.0
30	5.0	5.0
Q207		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q208		
E	2.3	2.3
C	5.0	5.0
B	3.0	3.0

<FMA>

MODE PIN NO.	REC	PLAY
IC2201		
1	2.4	2.4
2	0	0
3	2.4	2.4
4	0	0
5	0	0
6	2.5	2.5
7	2.0	2.0
8	0	0
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	0	0
14	0	0
15	0	0
16	2.5	2.5
17	0.6	0.3
18	2.5	2.5
19	2.5	2.5
20	2.5	0.1
21	2.5	0
22	2.6	0.6
23	0	0
24	2.5	0.7
25	4.9	4.9
26	2.6	0
27	0	-
28	4.2	0
29	4.4	1.8
30	4.4	1.7
31	1.0	3.0
32	2.5	2.5
33	2.5	2.5
34	0.7	0.3
35	2.5	2.5
36	0	0.2
37	1.7	1.7
38	0	0
39	0	0
40	5.0	5.0
41	0	0
42	5.0	5.0
43	4.9	4.9
44	3.2	3.2
45	0	0
46	4.8	4.8
47	2.5	2.5
48	2.5	2.5
49	3.4	2.8
50	1.3	2.9
51	0	0
52	0	0
53	4.4	4.4
54	0	0
55	0	0
56	0	0
57	4.4	4.4
58	10.0	10.0
59	4.5	4.5
60	0	0.8
61	2.5	2.5
62	2.4	2.4
63	4.4	4.4
64	4.5	4.5
Q2151		
E	4.9	4.9
C	5.0	5.0
B	2.1	2.1
Q2152		
E	5.0	5.0
C	4.9	4.9
B	0	0.2
Q2201		
E	0	0
C	0	0
B	0	0
Q2202		
E	0	0
C	0	0
B	0	0
Q2203		
E	5.2	5.2
C	0	0
B	5.1	5.1
Q2204		
E	0	0
C	5.1	5.1
B	0	0.2
Q2253		
E	0	0
C	-	0
B	0	0
Q2255		
E	0	0
C	0	0
B	4.2	4.2
Q2256		
E	0	0
C	4.2	4.2
B	0	0
Q2258		
E	4.5	0
C	4.4	1.7
B	0.2	5.0

<SYSTEM CONTROL>

MODE PIN NO.	REC	PLAY
IC3001		
1	2.8	2.5
2	0	0
3	1.9	2.5
4	2.5	2.5
5	2.5	2.5
6	2.6	2.6
7	2.5	2.5
8	2.5	2.5
9	5.1	5.1
10	5.1	5.1
11	0	0
12	0	0.2
13	0	1.1
14	4.6	4.6
15	5.1	5.1
16	1.3	2.9
17	0	0.7
18	0	0
19	3.4	2.8
20	0.2	0.2
21	4.1	4.1
22	4.2	0
23	0	0
24	5.0	5.0
25	0	0
26	5.1	5.1
27	5.1	5.1
28	5.1	5.1
29	5.1	5.1
30	0	0
31	5.1	5.1
32	0	0
33	0	0
34	0	5.1
35	0	0
36	0	0
37	5.0	5.0
38	1.8	1.8
39	4.5	4.5
40	0	0
41	5.1	5.1
42	4.6	4.6
43	0	0
44	0	0
45	5.1	5.1
46	5.1	0
47	0	0
48	5.1	0
49	4.9	4.9
50	4.9	4.9
51	5.1	5.1
52	1.0	1.0
53	4.5	4.5
54	-	-
55	-	-
56	0	0
57	0	0
58	5.0	5.0
59	3.0	3.0
60	0	0
61	0	0
62	0	0
63	0	0
64	-	-
65	-	-
66	5.1	5.1
67	-	-
68	0	0
69	-	-
70	5.1	5.1
71	5.1	5.1
72	5.0	5.0
73	5.1	5.1
74	0	0
75	4.7	4.7
76	4.7	4.7
77	3.1	3.1
78	5.1	0
79	0	5.1
80	0	0
81	0	0
82	5.1	5.1
83	-	-
84	0	0
85	0	0
86	4.7	4.7
87	5.1	5.1
88	4.8	0
89	0	0
90	0	0
91	3.0	3.0
92	5.0	5.0
93	5.1	5.1
94	5.1	5.1
95	5.1	5.1
96	0	0
97	5.1	5.1
98	0.2	0.2
99	0	-
100	-	-
101	2.5	2.5
102	1.2	1.2
103	0	0
104	0	0
105	5.1	5.1
106	5.0	5.0
107	0	0
108	1.6	1.6
109	5.1	5.1
110	0	0
111	0	0
112	2.5	2.5
IC3002		
1	5.1	5.1
2	5.0	5.0
3	0	0
IC3003		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.7	4.7
6	4.7	4.7
7	0	0
8	5.1	5.1
IC3004		
1	0	0
2	12.2	12.2
3	-	0
4	0	0
5	0	0
6	12.2	12.2
7	0	0.3
8	12.2	12.2
9	0	0
Q3001		
E	0	0
C	12.2	12.2
B	0	0
Q3002		
E	0	0
C	4.8	4.7
Q3003		
E	0	0
C	5.0	5.0
Q3004		
E	0	0
C	0	0
B	0.7	0.7
Q3005		
E	5.1	5.1
C	5.8	5.8
B	5.7	5.7
Q3008		
E	0	0
C	4.9	4.9
B	0	0
Q4001		
E	0	0
C	0	0
B	5.0	5.0
CN3001		
1	11.5	11.5
2	0	0
3	1.3	1.3
4	0	0
5	1.6	1.6
CN3002		
1	0	0.4
2	0	0.4
CN3003		
1	0	0
2	2.5	2.5
3	2.5	2.5
4	5.0	5.0
5	0	0
6	5.1	5.1
7	0	0
8	11.5	11.5
CN3004		
1	5.1	5.1
2	5.1	5.1
3	0	0
4	0	0
CN3011		
1	5.1	5.1
2	0	0
3	5.1	5.1
4	5.1	5.1
5	4.5	4.5
6	5.1	5.1
7	1.1	1.1
8	4.3	4.5
9	5.1	5.1
10	0	0
11	0	0
12	-19.5	-19.5
13	-15.7	-15.7
14	-28.4	-28.4
CN3012		
1	0.5	0.5
2	0.5	0.5
3	0	0
4	0	0
5	0	0
6	0	0

<SW. REG>

MODE PIN NO.	REC	PLAY
IC5301		
1	5.8	5.8
2	5.0	5.0
3	4.9	4.9
4	0	0
5	12.2	12.2
6	11.5	11.5
7	12.2	12.2
8	1.2	1.2
9	1.2	1.2
10	10.8	10.8
Q5101		
S	0	0
D	160.7	157.0
G	-	-
Q5102		
E	0	0
C	-	-
B	-	-
Q5301		
E	21.0	21.0
C	11.5	11.5
B	21.0	21.0
Q5302		
E	0	0
C	20.9	21.1
B	0	0
Q5303		
E	5.2	5.2
C	5.8	5.8
B	5.8	5.8
Q5304		
E	11.5	11.5
C	12.3	12.3
B	12.2	12.2
Q5305		
E	12.2	12.2
C	12.2	12.2
B	0.6	0.6
Q5306		
E	12.2	12.2
C	11.5	11.5
B	10.9	10.9
Q5310		
E	0	0
C	0	0
B	4.6	4.6
Q5311		
E	32.1	32.1
C	32.1	32.1
B	31.5	31.5
Q5312		
E	-15.4	-15.4
C	-15.6	-15.6
B	-16.1	-16.1

<TUNER>

MODE PIN NO.	REC	PLAY
IC6080		
1	1.2	1.2
2	1.7	1.7
3	2.9	2.9
4	0	0
5	4.1	4.1
6	4.1	4.1
7	4.1	4.1
8	11.5	11.5
Q6030		
E	0.7	0.7
C	0	0
B	0	0
Q6031		
E	0	0
C	0	0
B	5.0	5.0
Q6032		
E	0	0
C	0	0
B	4.3	4.3
CN6701		
1	-	-
2	4.7	4.7
3	4.7	4.7
4	0	0
5	4.9	4.9
6	11.5	11.5
7	0	0
8	0	0
9	0	0
10	2.4	2.4
11	0	0
12	4.4	4.4

<TERMINAL(MAIN)>

MODE PIN NO.	REC	PLAY
CN7501		
1	0.2	5.0
2	0	0
3	0	0
4	2.3	2.3
5	0	0
6	1.2	1.2
7	11.5	11.5
8	0.7	0.7
9	11.5	11.5
CN7502		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	4.8	4.8
8	4.7	4.7
9	5.1	5.1
10	5.1	5.1
CN7503		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
CN7504		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0

<3D SVHS (VIDEO)>

MODE PIN NO.	REC	PLAY
IC1001		
1	3.0	3.0
2	0	3.9
3	2.2	2.2
4	1.8	1.8
5	2.9	2.9
6	2.8	2.8
7	2.3	2.3
8	3.0	3.0
9	2.3	2.3
10	2.8	2.8
11	2.8	2.8
12	2.2	2.2
13	4.9	4.9
14	4.9	4.9
15	2.5	2.5
16	3.0	2.8
17	0	0
18	2.9	2.1
19	0.5	1.1
20	0	0.4
21	2.3	2.3
22	2.8	2.8
23	2.3	2.3
24	0	0
25	3.4	3.4
26	2.1	2.1
27	2.8	2.8
28	2.8	2.8
29	2.8	2.8
30	0	0
31	2.8	2.8
32	0	0
33	2.8	2.8
34	4.9	4.9
35	2.8	2.8
36	1.9	1.9
37	3.1	3.1
38	2.9	2.9
39	2.4	2.4
40	2.7	2.7
41	2.9	2.9
42	2.8	2.8
43	3.1	3.1
44	2.2	2.2
45	0	0
46	2.8	2.8
47	1.9	1.1
48	2.8	2.8
49	4.9	4.9
50	2.8	2.8
51	4.9	4.9
52	2.8	2.8
53	1.9	1.9
54	2.6	3.6
55	0	0
56	2.3	2.3
IC1002		
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
IC1006		
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	2.7	2.7
12	1.5	1.5
13	0.8	0.8
14	3.3	3.3
15	3.4	3.2
16	1.3	1.3
17	4.0	4.0
18	1.1	1.1
19	4.8	4.8
20	0.7	0.7
IC1007		
1	-	-
2	-	-
3	-	-
4	-	-
5	2.2	2.2
6	2.0	2.0
7	3.7	3.7
8	4.9	4.9
Q1004		
E	-	-
C	-	-
B	-	-
Q1005		
E	0	0
C	0	0
B	2.6	2.6
Q1006		
E	3.9	3.9
C	0	0
B	3.3	3.3
Q1007		
E	1.4	1.4
C	3.5	3.5
B	2.1	2.1
Q1012		
E	2.5	2.5
C	4.9	4.9
B	3.2	3.2
Q1014		
E	0	0
C	1.2	1.2
B	0.6	0.6
Q1015		
E	0.6	0.6
C	3.2	3.2
B	1.3	1.3
Q1016		
E	-	-
C	-	-
B	-	-
Q1021		
E	3.0	3.0
C	0	0
B	2.4	2.4
Q1022		
E	0	0
C	4.4	0
B	0.3	3.9
CN1001		
1	0	0
2	-	-
3	4.8	4.8
4	-	-
5	4.9	4.9
6	0	0
7	0	0
8	0	0
9	0.5	0
10	0	0
11	0	0
12	0	0
13	5.0	5.0
14	4.9	4.9
15	0	0
16	0	0
17	0.4	0.4
18	0	0
19	3.4	3.4
20	0	0
21	0	0
22	2.1	2.1
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
CN1002		
1	1.4	1.1
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1.4	1.1
8	1.9	1.9
9	1.3	2.3
10	5.0	5.0
11	2.4	2.4
12	2.9	2.9
13	0	0
14	0	0
15	2.3	2.3
16	0	0
17	4.9	4.9
18	4.9	4.9
19	4.9	4.9
20	5.0	5.0
21	2.3	2.3
22	0	0
23	2.3	2.3
24	0	0
25	0	0
26	2.4	2.4
27	1.8	1.8
28	0	0
29	0	0
30	0	0
CN1003		
1	2.1	2.1
2	0	0
3	2.3	2.3
4	0	0
5	5.7	5.7
6	0	0
7	5.6	5.6

<3D SVHS (3D/TBC)>

MODE PIN NO.	REC	PLAY
IC1401		
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	-	-
43	-	-
44	-	-
45	-	-
46	-	-
47	-	-
48	-	-
49	-	-
50	-	-
51	-	-
52	-	-
53	-	-
54	-	-
55	-	-
56	-	-
57	-	-
58	-	-
59	-	-
60	-	-
61	-	-
62	-	-
63	-	-
64	-	-
65	-	-
66	-	-
67	-	-
68	-	-
69	-	-
70	-	-
71	-	-
72	-	-
73	-	-
74	-	-
75	-	-
76	-	-
77	-	-
78	-	-
79	-	-
80	-	-
81	-	-
82	-	-
83	-	-
84	-	-
85	-	-
86	-	-
87	-	-
88	-	-
89	-	-
90	-	-
91	-	-
92	-	-
93	-	-
94	-	-
95	-	-
96	-	-
97	-	-
98	-	-
99	-	-
100	-	-
Q1401		
E	-	-
C	-	-
B	-	-
Q1402		
E	-	-
C	-	-
B	-	-
Q1403		
E	-	-
C	-	-
B	-	-
Q1404		
E	-	-
C	-	-
B	-	-
Q1405		
E	-	-
C	-	-
B	-	-
Q1406		
E	-	-
C	-	-
B	-	-
Q1407		
E	-	-
C	-	-
B	-	-
Q1408		
E	-	-
C	-	-
B	-	-
Q1409		
E	-	-
C	-	-
B	-	-
Q1410		
E	-	-
C	-	-
B	-	-
Q1411		
E	-	-
C	-	-
B	-	-
Q1412		
E	-	-
C	-	-
B	-	-
Q1413		
E	-	-
C	-	-
B	-	-
Q1414		
E	-	-
C	-	-
B	-	-
Q1416		
E	-	-
C	-	-
B	-	-
Q1417		
E	-	-
C	-	-
B	-	-
Q1418		
E	-	-
C	-	-
B	-	-

<TERMINAL>

MODE PIN NO.	REC	PLAY
IC7101		
1	1.6	1.6
2	0	0
3	1.6	1.6
4	11.5	11.5
5	2.0	2.0
6	0	0
7	5.1	5.1
8	11.5	11.5
9	5.1	5.1
10	5.2	5.2
11	5.1	5.1
12	0	0
13	4.8	4.8
14	4.8	4.8
15	5.8	5.8
16	5.1	5.1
17	5.8	5.8
18	5.1	5.1
19	11.5	11.5
20	2.5	2.5
21	1.4	1.1
22	1.4	1.1
23	2.5	2.5
24	2.0	2.0
IC7102		
1	6.4	6.4
2	5.2	5.2
3	5.7	5.7
4	0	0
5	5.7	5.7
6	5.7	5.7
7	0	0
8	6.4	6.4
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	6.4	6.4
Q7102		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q7103		
E	2.8	2.8
C	0	0
B	2.1	2.1
Q7104		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q7107		
E	-	-
C	-	-
B	-	-
Q7108		
E	-	-
C	-	-
B	-	-
Q7109		
E	-	-
C	-	-
B	-	-
Q7110		
E	-	-
C	-	-
B	-	-
Q7111		
E	0	0
C	6.2	6.2
B	0	0
Q7112		
E	0.6	0.6
C	11.5	11.5
B	0	0
CN7101		
1	0.2	5.0
2	0	0
3	0	0
4	2.3	2.3
5	0	0
6	1.2	1.2
7	11.5	11.5
8	0.7	0.7
9	11.5	11.5
CN7102		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	4.8	4.8
8	4.7	4.7
9	5.1	5.1
10	5.1	5.1
CN7103		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
CN7104		
1	2.1	2.1
2	0	0
3	2.3	2.3
4	0	0
5	5.7	5.7
6	0	0
7	5.6	5.6
CN7105		
1	0	0
2	0	0
3	0	0
4	0	0

<DEMODULATOR>

MODE PIN NO.	REC	PLAY
IC6701		
1	1.6	1.6
2	2.5	2.5
3	0	0
4	0	0
5	4.9	4.9
6	4.9	4.9
7	4.7	4.7
8	4.8	4.8
9	2.2	2.2
10	2.3	2.3
11	0	4.5
12	1.8	0.7
13	1.6	0.7
14	1.6	0.7
15	1.7	0.7
16	4.5	4.5
17	0	0
18	1.8	0.6
19	0.5	0
20	4.6	4.6
21	0.5	0
22	0.5	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0.5	0
28	0.5	0
29	0	0
30	3.7	3.7
31	3.7	3.7
32	0.6	0
33	8.3	8.3
34	7.4	7.4
35	0	0
36	3.6	3.6
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	2.5	2.5
44	3.7	3.7
45	0	0
46	4.9	4.9
47	1.5	1.5
48	1.5	1.5
49	0.6	0
50	0	0
51	-	-
52	-	-
Q6701		
E	8.4	8.4
C	11.5	11.5
B	9.0	9.0
Q6702		
E	2.9	2.9
C	8.4	8.4
B	3.6	3.6
Q6704		
E	0	0
C	0	0
B	3.3	3.3
Q6705		
E	0	0
C	0	0
B	3.3	3.3
CN6701		
1	4.7	4.7
2	4.7	4.7
3	0	0
4	4.9	4.9
5	11.5	11.5
6	0	0
7	0	0
8	0	0
9	2.4	2.4
10	0	0
11	4.4	4.4

<SWITCH/DISPLAY>

MODE PIN NO.	REC	PLAY
IC7001		
1	5.1	5.1
2	2.2	2.2
3	0	0
4	2.2	2.2
5	5.1	5.1
6	5.1	5.1
7	4.0	4.0
8	3.0	3.0
9	3.0	3.0
10	5.1	5.1
11	5.1	5.1
12	4.4	4.4
13	1.1	1.1
14	5.1	5.1
15	4.5	4.5
16	-28.4	-28.4
17	-28.4	-28.4
18	-28.3	-28.3
19	-28.3	-28.3
20	4.9	4.9
21	-24.0	-24.0
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	-	-
43	-	-
44	5.1	5.1
IC7002		
1	5.1	5.1
2	5.1	5.1
3	0	0
CN7001		
1	-28.4	-28.4
2	-15.7	-15.7
3	-19.5	-19.5
4	0	0
5	0	0
6	5.1	5.1
7	4.3	4.5
8	1.1	1.1
9	5.1	5.1
10	4.5	4.5
11	5.1	5.1
12	5.1	5.1
13	0	0
14	5.1	5.1
CN7191		
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
FW7001		
1	5.1	5.1
2	0	0

<JOG>

MODE PIN NO.	REC	PLAY
CN7005		
1	0	0
2	0	0
3	0	0
4	0	0
5	0.5	0.5
6	0.5	0.5

<JACK>

MODE PIN NO.	REC	PLAY
CN7192		
1	0	0
2	0	0
3	0	0
4	0	0

<REC SAFETY>

MODE PIN NO.	REC	PLAY
FW7001		
1	5.1	5.1
2	0	0

4.26 VOLTAGE CHARTS (VSH 2050)

<VIDEO/N.AUDIO>

MODE PIN NO.	REC	PLAY
IC1		
1	2.5	2.5
2	2.5	2.5
3	0	0
4	2.7	2.5
5	0	0
6	2.8	2.8
7	2.5	2.5
8	2.5	2.5
9	2.5	2.5
10	2.5	2.5
11	2.5	2.5
12	5.0	5.0
13	1.9	1.4
14	1.9	1.4
15	2.6	3.0
16	1.5	0.7
17	0.9	0.9
18	2.3	2.3
19	3.1	3.1
20	2.7	2.7
21	2.3	2.3
22	1.9	1.9
23	3.0	3.0
24	2.2	2.2
25	1.4	1.4
26	2.1	2.1
27	0	0
28	4.9	4.9
29	1.6	1.9
30	3.0	3.0
31	2.8	2.8
32	0	0
33	0	0
34	0	0
35	3.0	3.0
36	5.0	5.0
37	0	0
38	5.0	5.0
39	3.3	3.3
40	5.0	5.0
41	5.0	5.0
42	2.0	2.0
43	5.0	5.0
44	2.5	2.5
45	0	0
46	2.0	2.0
47	0	0
48	0	0
49	0	0
50	0.4	0.4
51	0	0
52	1.3	2.4
53	3.0	2.8
54	1.9	1.9
55	2.1	2.1
56	2.8	2.8
57	0	0
58	3.0	3.0
59	3.3	3.3
60	2.1	2.1
61	4.9	4.9
62	4.9	4.9
63	4.9	4.9
64	0	0
65	1.1	2.4
66	4.9	4.9
67	4.9	4.9
68	0	0
69	2.8	2.8
70	2.7	2.7
71	-	-
72	2.3	2.1
73	-	-
74	2.7	1.1
75	-	-
76	2.3	2.3
77	4.5	4.5
78	2.7	2.7
79	4.6	2.1
80	0	0
81	-	-
82	1.2	1.2
83	2.3	2.3
84	0	1.3
85	0	0
86	2.3	2.3
87	2.2	2.2
88	2.3	2.3
89	2.3	2.3
90	4.9	4.9
91	0	0
92	0	0
93	0	0
94	0	0
95	0.5	0.5
96	5.0	5.0
97	0.3	0
98	5.0	5.0
99	0.5	2.5
100	2.5	2.5
IC2		
1	2.7	2.7
2	0	0
3	2.7	2.7
4	4.9	0
5	2.7	2.7
6	5.0	5.0
7	2.0	2.0
8	0	0
Q1		
E	3.4	3.4
C	0	0
B	2.7	2.7
Q6		
E	2.7	2.7
C	0	0
B	2.1	2.1
Q13		
E	1.1	1.1
C	3.9	3.9
B	1.7	1.7
Q14		
E	3.2	3.2
C	4.9	4.9
B	3.9	3.9
Q15		
E	3.8	3.8
C	0	0
B	3.2	3.2
Q16		
E	4.9	4.9
C	4.9	0
B	0.2	5.0
Q17		
E	0	0
C	0	0
B	3.0	3.0
Q18		
E	0	0
C	0	0
B	3.0	3.0
Q34		
E	2.2	2.2
C	2.3	2.3
B	0	0
Q35		
E	2.3	2.3
C	2.2	2.2
B	0	0
Q36		
E	0	0
C	0	0
B	0.7	0.7
Q37		
E	0	0
C	0	0
B	0.7	0.7
Q47		
E	4.9	4.9
C	2.3	2.3
B	2.8	2.8
Q48		
E	1.9	1.9
C	0	0
B	1.0	1.0
Q49		
E	2.1	2.1
C	4.9	4.9
B	2.8	2.8
Q55		
E	0	0
C	0	0
B	3.0	3.0
Q101		
E	0	0
C	0	0
B	5.0	5.0
Q152		
E	5.0	2.7
C	0	0
B	4.5	2.1
Q153		
E	2.1	2.1
C	4.9	4.9
B	2.7	2.7
Q2001		
E	-14.3	0
C	0	0
B	-19.7	0.7
Q2002		
E	-14.2	0
C	0	0
B	-19.3	0.7
Q2003		
E	5.0	5.0
C	-19.5	4.9
B	5.0	0
Q2051		
E	0	0
C	8.1	0.2
B	0.4	0.2
Q2052		
E	11.5	11.5
C	11.3	1.1
B	10.7	11.5
Q2053		
E	0	0
C	0	11.4
B	4.5	0
Q2054		
E	11.3	1.1
C	11.2	0
B	10.5	1.1
Q2055		
E	0	0
C	0	1.1
B	5.0	0
CN1		
1	0	0
2	0	0
3	0	0
4	0	0
5	2.3	2.3
6	2.3	2.3
7	2.2	2.2
8	2.2	2.2
9	2.5	0
10	2.5	0
11	2.5	0
CN101		
11	0	0
12	0	0
13	4.9	4.9
14	4.9	4.9
15	0	5.1
16	0	0
17	0.3	0.3
18	0	0
19	3.4	3.4
20	0	0
21	0	0
22	2.1	2.1
23	0	0
24	0.3	0.3
25	0	0
26	0.3	0.3
27	0	0
28	0	0
29	0	0
30	0	0
CN102		
1	1.3	1.1
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1.3	1.1
8	1.9	1.9
9	1.3	2.4
10	5.0	5.0
11	2.3	2.3
12	3.0	3.0
13	0	0
14	0	0
15	2.3	2.3
16	0	0
17	5.0	5.0
18	4.9	4.9
19	4.9	4.9
20	4.9	4.9
21	2.4	2.4
22	0	0
23	2.3	2.3
24	0	0
25	0	0
26	2.5	2.5
27	1.9	1.7
28	0.7	0.7
29	0	0
30	0.5	0.5
CN2001		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	2.2	2.5
7	2.5	2.5
CN2002		
1	0	0
2	0	0

<ON SCREEN>

MODE PIN NO.	REC	PLAY
IC201		
1	0	0
2	2.7	2.7
3	5.0	5.0
4	0	0
5	4.7	4.7
6	2.5	2.5
7	2.5	2.5
8	5.0	5.0
9	3.0	3.0
10	4.5	4.5
11	1.2	1.2
12	5.0	5.0
13	2.9	2.9
14	2.9	2.9
15	0	0
16	1.2	1.2
17	0	0
18	5.0	5.0
19	2.3	2.3
20	0	0
21	2.3	2.3
22	0.5	0.5
23	5.0	5.0
24	2.9	2.9
25	2.5	2.5
26	5.0	5.0
27	4.7	4.7
28	3.7	3.7
29	5.0	5.0
30	5.0	5.0
Q207		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q208		
E	2.3	2.3
C	5.0	5.0
B	3.0	3.0

<FMA>

MODE PIN NO.	REC	PLAY
IC2201		
1	2.4	2.4
2	0	0
3	2.4	2.4
4	0	0
5	0	0
6	2.5	2.5
7	2.0	2.0
8	0	0
9	0	0
10	0	0
11	0	0
12	2.0	2.0
13	0	0
14	0	0
15	0	0
16	2.5	2.5
17	0.6	0.6
18	2.5	2.5
19	2.5	2.5
20	2.5	0.5
21	2.5	0
22	2.6	0.6
23	0	0
24	2.5	0.7
25	4.9	4.9
26	2.6	0
27	0	-
28	4.2	2.1
29	4.4	1.8
30	4.4	1.7
31	1.0	1.9
32	2.5	2.5
33	2.5	2.5
34	0.7	0.7
35	2.5	2.5
36	0	0.2
37	1.7	1.7
38	0	0
39	0	0
40	5.0	5.0
41	0	0
42	5.0	5.0
43	4.9	4.9
44	3.2	3.2
45	0	0
46	4.8	4.8
47	2.5	2.5
48	2.5	2.5
49	0.2	0.2
50	1.0	1.0
51	0	0
52	0	0
53	4.4	4.4
54	0	0
55	0	0
56	0	0
57	4.4	4.4
58	10.0	10.0
59	4.5	4.5
60	0.8	0.8
61	2.5	2.5
62	2.4	2.4
63	4.4	4.4
64	4.5	4.5
Q2151		
E	4.9	4.9
C	5.0	5.0
B	2.1	2.1
Q2201		
E	0	0
C	0	0
B	-0.3	-0.2
Q2202		
E	0	0
C	0	0
B	0	-0.2
Q2203		
E	5.2	5.2
C	-0.6	-0.1
B	5.1	5.1
Q2204		
E	0	0
C	5.1	5.1
B	0	0.2
Q2253		
E	0	0
C	0	0
B	4.6	4.6
Q2255		
E	0	0
C	0	0
B	4.2	4.2
Q2256		
E	0	0
C	4.2	4.2
B	0	0
Q2258		
E	4.5	0
C	4.4	1.7
B	0.2	5.0

<SYSTEM CONTROL>

MODE PIN NO.	REC	PLAY
IC3001		
1	2.8	2.5
2	0	0
3	1.9	2.5
4	2.5	2.5
5	2.5	2.5
6	2.6	2.6
7	2.5	2.5
8	2.5	2.5
9	5.1	5.1
10	5.1	5.1
11	0	0
12	0	1.3
13	0	1.3
14	4.6	4.6
15	4.9	4.9
16	0.9	0.9
17	1.0	0
18	0	0
19	0.2	0.2
20	0.2	0.2
21	4.1	4.1
22	4.2	2.0
23	0	0
24	5.0	5.0
25	0	0
26	5.1	5.1
27	5.1	5.1
28	5.1	5.1
29	5.1	5.1
30	5.1	5.1
31	5.1	5.1
32	0	0
33	0	0
34	0	5.1
35	0	0
36	0	0
37	5.0	5.0
38	0.9	-
39	4.5	4.5
40	0	0
41	5.1	5.1
42	4.6	4.6
43	0	0
44	0	0
45	5.1	5.1
46	5.1	0
47	0	0
48	5.1	0
49	4.9	4.9
50	4.9	4.9
51	5.1	5.1
52	-	1.0
53	4.5	4.5
54	-	-
55	-	-
56	0	0
57	0	0
58	5.0	5.0
59	3.0	3.0
60	0	0
61	0	0
62	0	0
63	0	0
64	-	-
65	-	-
66	5.1	5.1
67	-	-
68	0	0
69	-	-
70	5.1	5.1
71	5.1	5.1
72	5.0	5.0
73	5.1	5.1
74	0	0
75	4.7	4.7
76	4.7	4.7
77	3.1	3.1
78	5.1	0
79	0	5.1
80	0	0
81	0	0
82	5.1	5.1
83	0	0
84	0	0
85	0	0
86	4.7	4.7
87	5.1	5.1
88	4.8	0
89	0	0
90	0	0
91	3.0	3.0
92	5.0	5.0
93	5.1	5.1
94	5.1	5.1
95	5.1	5.1
96	0	0
97	5.1	5.1
98	0.2	0.2
99	0	-
100	-	-
101	2.5	2.5
102	1.2	1.2
103	0	0
104	0	0
105	5.1	5.1
106	5.0	5.0
107	0	0
108	1.6	1.6
109	5.1	5.1
110	0	0
111	0	0
112	2.5	2.5
IC3002		
1	5.1	5.1
2	5.0	5.0
3	0	0
IC3003		
1	0	0
2	0	0
3	0	0
4	0	0
5	4.7	4.7
6	4.7	4.7
7	0	0
8	5.1	5.1
IC3004		
1	0	0
2	12.2	12.2
3	-	1.0
4	0	0.3
5	0	0
6	12.2	12.2
7	0.3	1.0
8	12.2	12.2
9	0	0
Q3001		
E	0	0
C	12.2	12.2
B	0	0
Q3002		
E	0	0
C	3.9	4.5
Q3003		
E	0	0
C	4.4	4.6
Q3004		
E	0	0
C	0	0
B	0.7	0.7
Q3005		
E	5.1	5.1
C	5.8	5.8
B	5.7	5.7
Q3008		
E	0	0
C	4.9	4.9
B	0	0
Q4001		
E	0	0
C	0	0
B	5.0	5.0
CN3001		
1	11.5	11.5
2	0	0
3	1.3	1.3
4	0	0
5	1.6	1.6
CN3002		
1	1.8	0.9
2	1.7	0.9
CN3003		
1	0	0
2	2.5	2.5
3	2.5	2.5
4	5.0	5.0
5	0	0
6	5.1	5.1
7	0.3	0.3
8	12.2	12.2
CN3004		
1	5.1	5.1
2	5.1	5.1
3	0	0
4	0	0
CN3011		
1	5.1	5.1
2	0	0
3	5.1	5.1
4	5.1	5.1
5	4.5	4.5
6	5.1	5.1
7	-	1.1
8	4.5	4.5
9	5.1	5.1
10	0	0
11	0	0
12	-19.9	-19.9
13	-16.1	-16.1
14	-28.7	-28.7
CN3012		
1	0.5	0.5
2	0.5	0.5
3	0	0
4	0	0
5	0	0
6	0	0

<SW. REG>

MODE PIN NO.	REC	PLAY
IC5301		
1	5.8	5.8
2	5.0	5.0
3	4.9	4.9
4	0	0
5	12.2	12.2
6	11.5	11.5
7	12.2	12.2
8	1.2	1.2
9	1.2	1.2
10	10.8	10.8
Q5101		
S	0	0
D	160.7	157.0
G	-	-
Q5102		
E	0	0
C	-	-
B	-	-
Q5303		
E	5.2	5.2
C	5.8	5.8
B	5.8	5.8
Q5304		
E	11.5	11.5
C	12.3	12.3
B	12.2	12.2
Q5305		
E	12.2	12.2
C	12.2	12.2
B	0.6	0.6
Q5306		
E	12.2	12.2
C	11.5	11.5
B	10.9	10.9
Q5310		
E	0	0
C	0	0
B	4.6	4.6
Q5311		
E	32.1	32.1
C	32.1	32.1
B	31.5	31.5
Q5312		
E	-15.4	-15.4
C	-15.6	-15.6
B	-16.1	-16.1

<TUNER>

MODE PIN NO.	REC	PLAY
IC6080		
1	1.2	1.2
2	1.7	1.7
3	2.9	2.9
4	0	0
5	4.1	4.1

MODE PIN NO.	REC	PLAY
6	4.1	4.1
7	4.1	4.1
8	11.5	11.5
Q6030		
E	0.7	0.7
C	0	0
B	0	0
Q6031		
E	0	0
C	0	0
B	5.0	5.0
Q6032		
E	0	0
C	0	0
B	4.3	4.3
CN6701		
1	-	-
2	4.8	4.8
3	4.6	4.6
4	0	0
5	4.9	4.9
6	11.5	11.5
7	0	0
8	0	0
9	0	0
10	2.4	2.4
11	0	0
12	4.4	4.4

<TERMINAL(MAIN)>

MODE PIN NO.	REC	PLAY
CN7501		
1	0.2	5.0
2	0	0
3	0	0
4	2.3	2.3
5	0	0
6	1.2	1.2
7	11.5	11.5
8	0.7	0.7
9	11.5	11.5
CN7502		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	4.8	4.8
8	4.7	4.7
9	5.1	5.1
10	5.1	5.1
CN7503		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
CN7504		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0

<2D SVHS (VIDEO)>

MODE PIN NO.	REC	PLAY
IC1001		
1	3.0	3.0
2	0.2	4.9
3	2.2	2.2
4	1.8	1.8
5	2.9	2.9
6	2.8	2.8
7	2.3	2.3
8	3.0	3.0
9	2.3	2.3
10	2.8	2.8
11	2.8	2.8
12	2.2	2.2
13	4.9	4.9
14	4.9	4.9
15	2.5	2.5
16	2.8	2.8
17	0	0
18	2.9	2.1
19	0.3	0.3
20	0	0
21	2.3	2.3
22	2.8	2.8
23	2.3	2.3
24	0	0
25	3.4	3.4
26	2.1	2.1
27	2.8	2.8
28	2.8	2.8
29	2.8	2.8
30	0	0
31	2.8	2.8
32	0	0
33	2.8	2.8
34	4.9	4.9
35	2.8	2.8
36	1.9	1.9
37	3.1	3.1
38	2.9	2.9
39	2.4	2.4
40	2.7	2.7
41	2.9	2.9
42	2.8	2.8
43	3.1	3.1
44	2.2	2.2
45	0	0
46	2.8	2.8
47	1.7	1.1
48	2.8	2.8
49	4.9	4.9
50	2.8	2.8
51	4.9	4.9
52	2.8	2.8
53	1.9	1.9
54	2.6	3.6
55	0	0
56	2.3	2.3
IC1002		
1	1.9	1.9
2	0.2	4.9
3	3.3	3.3
4	3.3	3.3
5	4.9	4.9
6	2.1	2.1
7	2.0	2.0
8	4.9	4.9
9	1.4	1.4
10	2.9	2.9
11	2.8	2.8
12	2.8	2.8
13	0	0
14	2.8	2.8
15	2.8	2.8
16	1.9	1.9
17	1.9	1.9
18	1.9	1.9
IC1006		
1	0	0
2	0	4.9
3	0	0
4	2.7	2.7
5	0	0
6	4.0	4.0
7	0	0
8	0	0.2
9	4.0	4.0
10	4.9	4.9
11	2.7	2.7
12	1.5	1.5
13	0.8	0.8
14	3.3	3.3
15	3.4	3.2
16	1.3	1.3
17	4.0	4.0
18	1.1	1.1
19	4.8	4.8
20	0.7	0.7
IC1007		
1	3.7	3.7
2	2.0	2.0
3	2.2	2.2
4	0	0
5	2.4	2.4
6	2.4	2.4
7	1.1	1.1
8	4.9	4.9
Q1005		
E	0	0
C	0	0
B	2.6	2.6
Q1006		
E	4.1	4.1
C	0	0
B	3.5	3.5
Q1007		
E	1.4	1.4
C	3.5	3.5
B	2.1	2.1
Q1012		
E	2.5	2.5
C	4.9	4.9
B	3.2	3.2
Q1014		
E	0	0
C	1.2	1.2
B	0.6	0.6
Q1015		
E	0.6	0.6
C	3.2	3.2
B	1.3	1.3
Q1016		
E	0	0
C	0	0
B	5.0	5.0
CN1001		
1	0	0
2	0	0
3	4.9	4.9
4	4.9	4.9
5	0	5.1
6	0	0
7	0.3	0.3
8	0	0
9	3.4	3.4
10	0	0
11	0	0
12	2.1	2.1
13	0	0
14	0.3	0.3
15	0	0
16	0.3	0.3
17	0	0
18	0	0
19	0	0
20	0	0
CN1002		
1	1.3	1.1
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	1.3	1.1
8	1.9	1.9
9	1.3	2.4
10	5.0	5.0
11	2.3	2.3
12	3.0	3.0
13	0	0
14	0	0
15	2.3	2.3
16	0	0
17	5.0	5.0
18	4.9	4.9
19	4.9	4.9
20	4.9	4.9
21	2.4	2.4
22	0	0
23	2.3	2.3
24	0	0
25	0	0
26	2.5	2.5
27	1.9	1.7
28	0.7	0.7
29	0	0
30	0.5	0.5
CN1003		
1	2.1	2.1
2	0	0
3	2.3	2.3
4	0	0
5	5.7	5.7
6	0	0
7	5.6	5.6

<2D SVHS (2D Y/C)>

MODE PIN NO.	REC	PLAY
IC1201		
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	-	-
20	-	-
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	-	-
43	-	-
44	-	-
45	-	-
46	-	-
47	-	-
48	-	-
Q1201		
E	-	-
C	-	-
B	-	-
Q1202		
E	-	-
C	-	-
B	-	-
Q1203		
E	-	-
C	-	-
B	-	-
Q1205		
E	-	-
C	-	-
B	-	-
Q1206		
E	-	-
C	-	-
B	-	-
Q1207		
E	-	-
C	-	-
B	-	-
Q1208		
E	-	-
C	-	-
B	-	-
Q1209		
E	-	-
C	-	-
B	-	-
Q1210		
E	-	-
C	-	-
B	-	-
Q1211		
E	-	-
C	-	-
B	-	-
Q1212		
E	-	-
C	-	-
B	-	-
Q1213		
E	-	-
C	-	-
B	-	-
Q1215		
E	-	-
C	-	-
B	-	-
Q1216		
E	-	-
C	-	-
B	-	-
Q1217		
E	-	-
C	-	-
B	-	-
Q1218		
E	-	-
C	-	-
B	-	-
Q1219		
E	-	-
C	-	-
B	-	-
Q1221		
E	-	-
C	-	-
B	-	-

<TERMINAL>

MODE PIN NO.	REC	PLAY
IC7101		
1	1.6	1.6
2	0	0
3	1.6	1.6
4	11.5	11.5
5	2.0	2.0
6	0	0
7	5.1	5.1
8	11.5	11.5
9	5.1	5.1
10	5.2	5.2
11	5.1	5.1
12	0	0
13	4.8	4.8
14	4.8	4.8
15	5.8	5.8
16	5.1	5.1
17	5.8	5.8
18	5.1	5.1
19	11.5	11.5
20	2.5	2.5
21	1.4	1.1
22	1.4	1.1
23	2.5	2.5
24	2.0	2.0
IC7102		
1	6.4	6.4
2	5.2	5.2
3	5.7	5.7
4	0	0
5	5.7	5.7
6	5.7	5.7
7	0	0
8	6.4	6.4
9	-	-
10	-	-
11	-	-
12	-	-
13	-	-
14	-	-
15	-	-
16	6.4	6.4
Q7102		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q7103		
E	2.8	2.8
C	0	0
B	2.1	2.1
Q7104		
E	3.0	3.0
C	0	0
B	2.3	2.3
Q7107		
E	-	-
C	-	-
B	-	-
Q7108		
E	-	-
C	-	-
B	-	-
Q7109		
E	-	-
C	-	-
B	-	-
Q7110		
E	-	-
C	-	-
B	-	-
Q7111		
E	0	0
C	6.2	6.2
B	0	0
Q7112		
E	0.6	0.6
C	11.5	11.5
B	0	0
CN7101		
1	0.2	5.0
2	0	0
3	0	0
4	2.3	2.3
5	0	0
6	1.2	1.2
7	11.5	11.5
8	0.7	0.7
9	11.5	11.5
CN7102		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	4.8	4.8
8	4.7	4.7
9	5.1	5.1
10	5.1	5.1
CN7103		
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
CN7104		
1	2.1	2.1
2	0	0
3	2.3	2.3
4	0	0
5	5.7	5.7
6	0	0
7	5.6	5.6
CN7105		
1	0	0
2	0	0
3	0	0
4	0	0

<DEMODULATOR>

MODE PIN NO.	REC	PLAY
IC6701		
1	0.3	1.2
2	2.5	2.5
3	0	0
4	0	0
5	4.9	4.9
6	4.9	4.9
7	4.7	4.7
8	4.8	4.8
9	2.2	2.2
10	2.3	2.3
11	0	0
12	0.3	1.2
13	0.3	1.2
14	0.3	1.2
15	0.3	1.2
16	4.5	4.5
17	0	0
18	0.3	1.1
19	0	0.4
20	4.6	4.6
21	0	0.4
22	0	0.2
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	3.7	3.7
31	3.7	3.7
32	0	0
33	8.3	8.3
34	7.4	7.4
35	0	0
36	3.6	3.6
37	0	0
38	0	0
39	0	0
40	0	0
41	0	0
42	0	0
43	2.5	2.5
44	3.7	3.7
45	0	0
46	4.9	4.9
47	1.5	1.5
48	1.5	1.5
49	0	0.4
50	0	0
51	2.2	2.2
52	2.1	2.1
Q6701		
E	8.3	8.3
C	11.5	11.5
B	8.9	8.9
Q6702		
E	2.8	2.8
C	8.2	8.2
B	3.5	3.5
Q6704		
E	0	0
C	0	0
B	3.3	3.3
Q6705		
E	0	0
C	0	0
B	3.3	3.3
CN6701		
1	4.8	4.8
2	4.6	4.6
3	0	0
4	4.9	4.9
5	11.5	11.5
6	0	0
7	0	0
8	0	0
9	2.4	2.4
10	0	0
11	4.4	4.4

<SWITCH/DISPLAY>

MODE PIN NO.	REC	PLAY
IC7001		
1	5.1	5.1
2	2.2	2.4
3	0	0
4	2.2	2.2
5	5.1	5.1
6	5.1	5.1
7	5.1	5.1
8	5.1	5.1
9	5.1	5.1
10	5.1	5.1
11	5.1	5.1
12	4.4	4.4
13	1.0	1.0
14	5.1	5.1
15	4.5	4.5
16	-28.8	-28.8
17	-28.8	-28.8
18	-28.5	-28.5
19	-28.5	-28.5
20	5.1	5.1
21	-24.3	-24.3
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	-	-
29	-	-
30	-	-
31	-	-
32	-	-
33	-	-
34	-	-
35	-	-
36	-	-
37	-	-
38	-	-
39	-	-
40	-	-
41	-	-
42	-	-
43	-	-
44	5.1	5.1
IC7002		
1	5.1	5.1
2	5.1	5.1
3	0	0
CN7001		
1	-28.7	-28.7
2	-16.1	-16.1
3	-19.9	-19.9
4	0	0
5	0	0
6	5.1	5.1
7	4.5	4.5
8	1.1	1.1
9	5.1	5.1
10	4.5	4.5
11	5.1	5.1
12	5.1	5.1
13	0	0
14	5.1	5.1
CN7191		
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
FW7001		
1	5.1	5.1
2	0	0

<JOG>

MODE PIN NO.	REC	PLAY
CN7005		
1	0	0
2	0	0
3	0	0
4	0	0
5	0.5	0.5
6	0.5	0.5

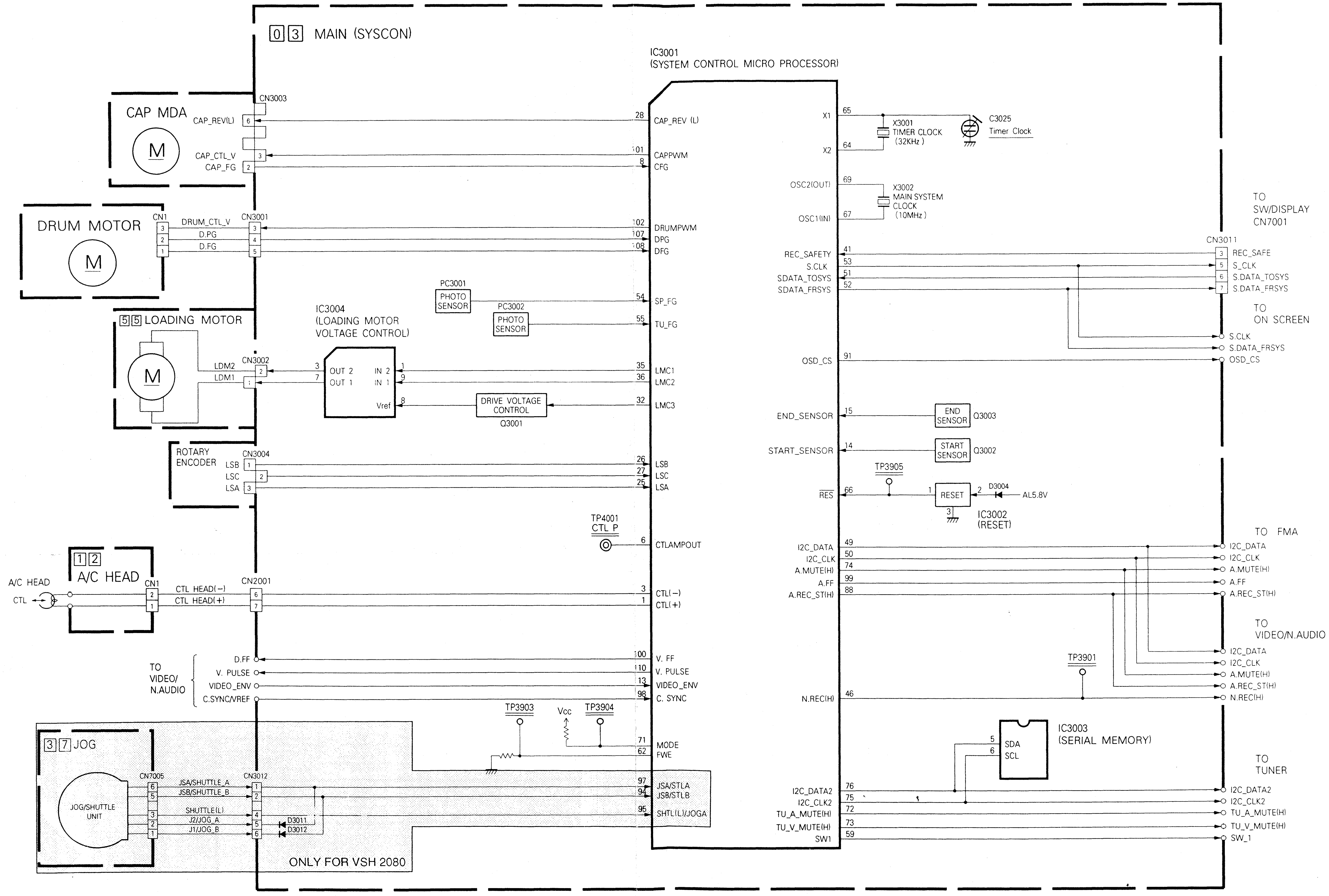
<JACK>

MODE PIN NO.	REC	PLAY
CN7192		
1	0	0
2	0	0
3	0	0
4	0	0

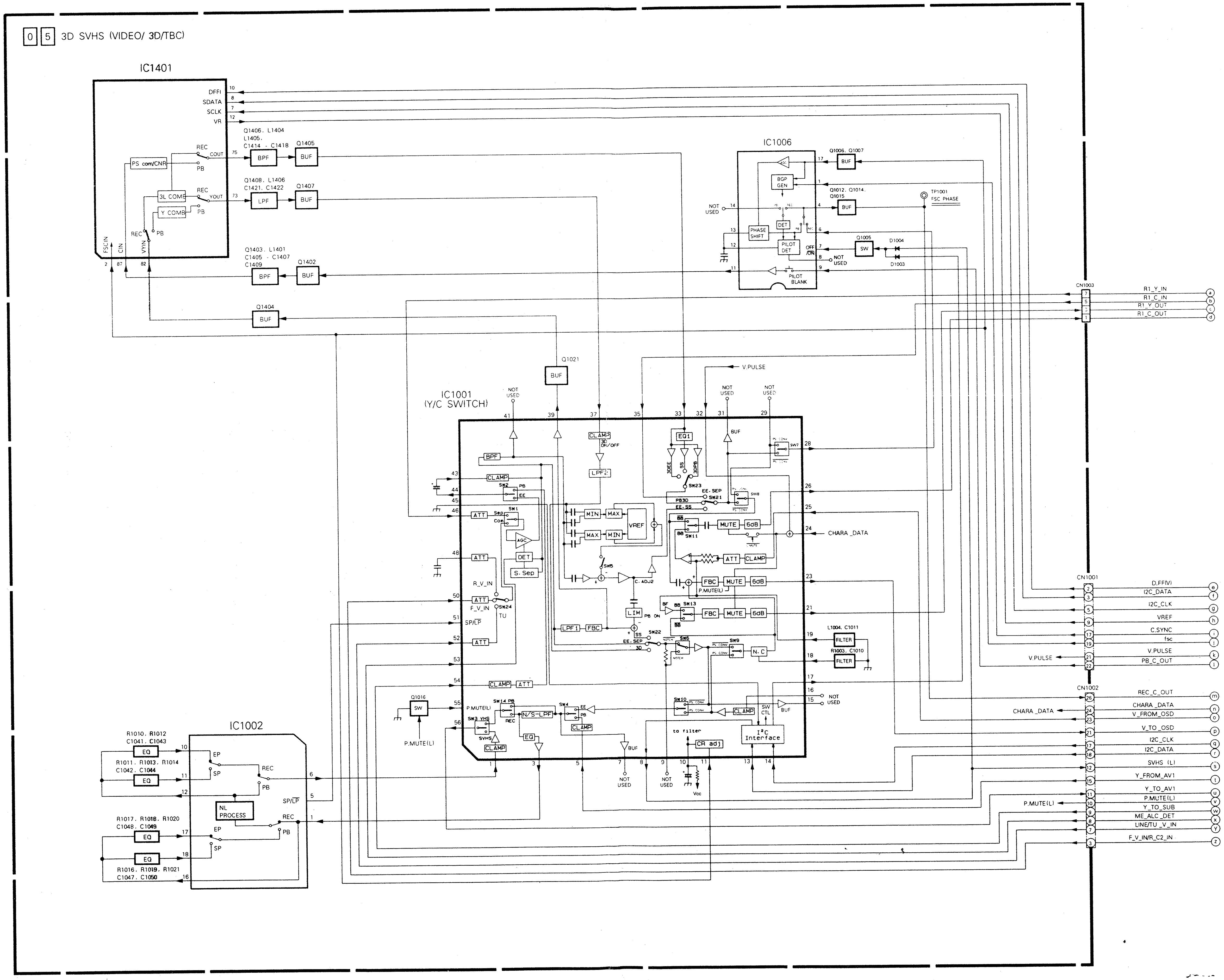
<REC SAFETY>

MODE PIN NO.	REC	PLAY
FW7001		
1	5.1	5.1
2	0	0

4.27 SYSTEM CONTROL BLOCK DIAGRAM

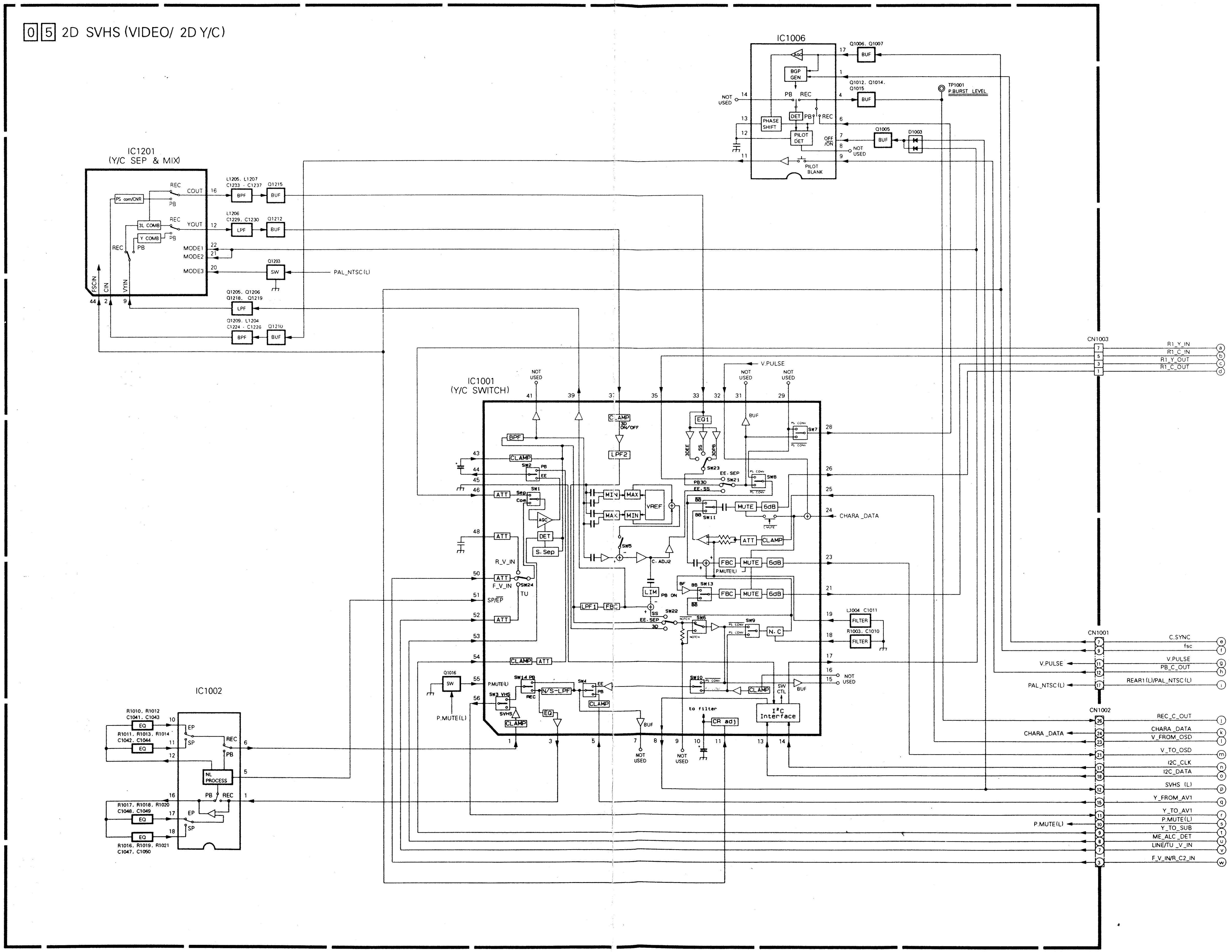

0 3 MAIN (SYSCON)
IC3001
(SYSTEM CONTROL MICRO PROCESSOR)
CAP MDA
M
CAP_REV(L)
CAP_CTL_V
CAP_FG
CN3003
6
3
2
28
CAP_REV (L)
101
CAPPWM
8
CFG
DRUM MOTOR
M
CN1
DRUM_CTL_V
D.PG
D.FG
CN3001
3
4
5
102
DRUMPWM
107
DPG
108
DFG
PC3001
PHOTO SENSOR
PC3002
PHOTO SENSOR
54
SP_FG
55
TU_FG
5 5 LOADING MOTOR
M
IC3004
(LOADING MOTOR VOLTAGE CONTROL)
LDM2
LDM1
CN3002
OUT 2
OUT 1
IN 2
IN 1
Vref
35
LMC1
36
LMC2
DRIVE VOLTAGE CONTROL
Q3001
32
LMC3
ROTARY ENCODER
LSB
LSC
LSA
CN3004
26
LSB
27
LSC
25
LSA
TP4001
CTL P
6
CTLAMPOUT
1 2
A/C HEAD
A/C HEAD
CTL
CN1
CTL HEAD(−)
CTL HEAD(+)
CN2001
3
CTL(−)
1
CTL(+)
TO VIDEO/ N.AUDIO
D.FF
V. PULSE
VIDEO_ENV
C.SYNC/VREF
100
V. FF
110
V. PULSE
13
VIDEO_ENV
98
C. SYNC
TP3903
Vcc
TP3904
71
MODE
62
FWE
3 7 JOG
JOG/SHUTTLE UNIT
CN7005
JSA/SHUTTLE_A
JSB/SHUTTLE_B
SHUTTLE(L)
J2/JOG_A
J1/JOG_B
CN3012
D3011
D3012
97
JSA/STLA
94
JSB/STLB
95
SHTL(L)/JOGA
ONLY FOR VSH 2080
X1
65
X2
64
X3001
TIMER CLOCK
(32KHz)
C3025
Timer Clock
OSC2(OUT)
69
OSC1(IN)
67
X3002
MAIN SYSTEM CLOCK
(10MHz)
TO SW/DISPLAY CN7001
CN3011
REC_SAFETY
41
S.CLK
53
SDATA_TOSYS
51
SDATA_FRSYS
52
REC_SAFE
S_CLK
S.DATA_TOSYS
S.DATA_FRSYS
TO ON SCREEN
S.CLK
S.DATA_FRSYS
OSD_CS
OSD_CS
91
END_SENSOR
15
END SENSOR
Q3003
START_SENSOR
14
START SENSOR
Q3002
TP3905
RES
66
RESET
D3004
AL5.8V
IC3002
(RESET)
TO FMA
I2C_DATA
49
I2C_CLK
50
A.MUTE(H)
74
A.FF
99
A.REC_ST(H)
88
I2C_DATA
I2C_CLK
A.MUTE(H)
A.FF
A.REC_ST(H)
TO VIDEO/N.AUDIO
I2C_DATA
I2C_CLK
A.MUTE(H)
A.REC_ST(H)
N.REC(H)
TP3901
N.REC(H)
46
IC3003
(SERIAL MEMORY)
SDA
SCL
TO TUNER
I2C_DATA2
76
I2C_CLK2
75
TU_A_MUTE(H)
72
TU_V_MUTE(H)
73
SW1
59
I2C_DATA2
I2C_CLK2
TU_A_MUTE(H)
TU_V_MUTE(H)
SW_1

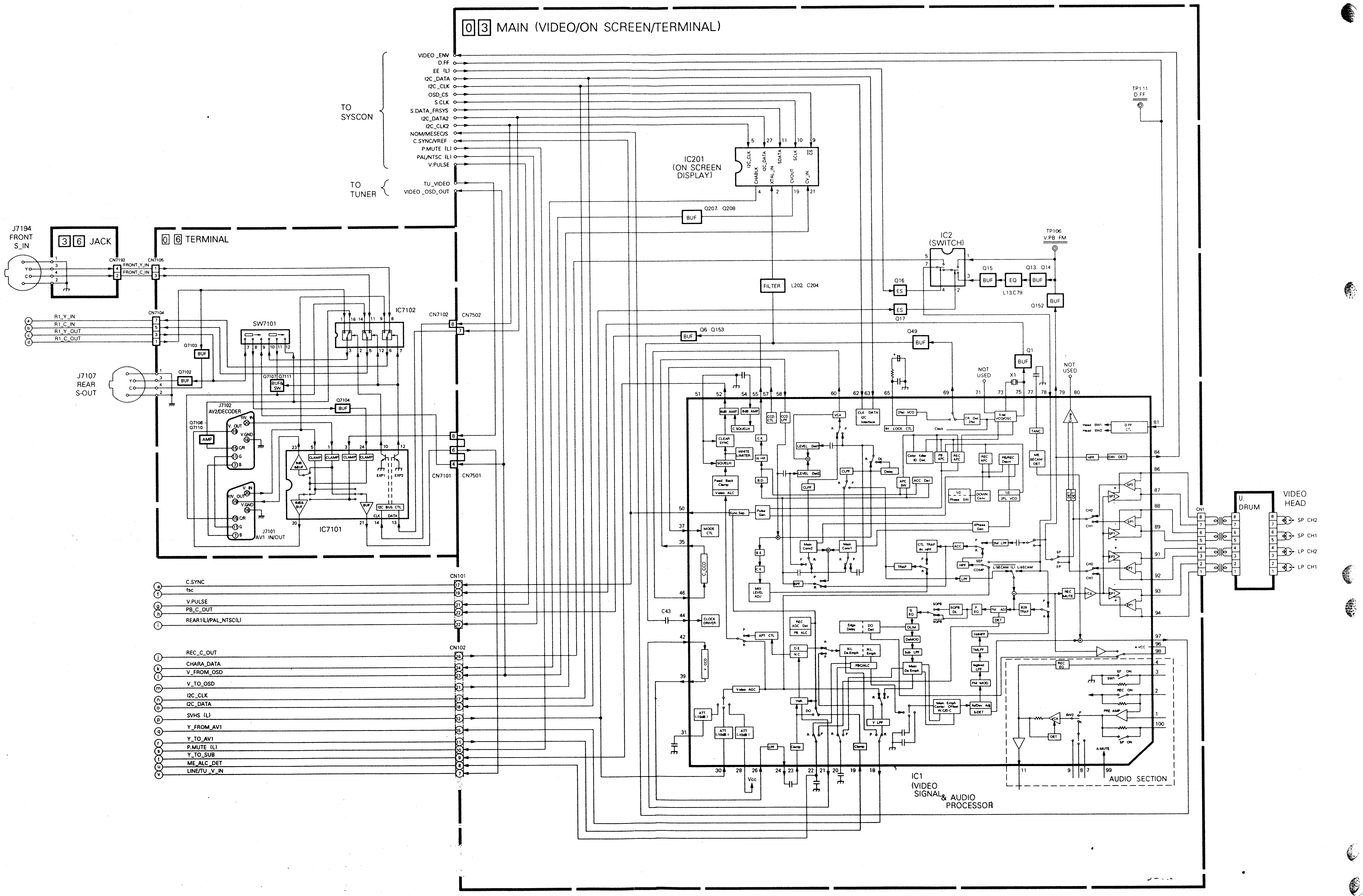
4.28 VIDEO BLOCK DIAGRAM (VSH 2080)

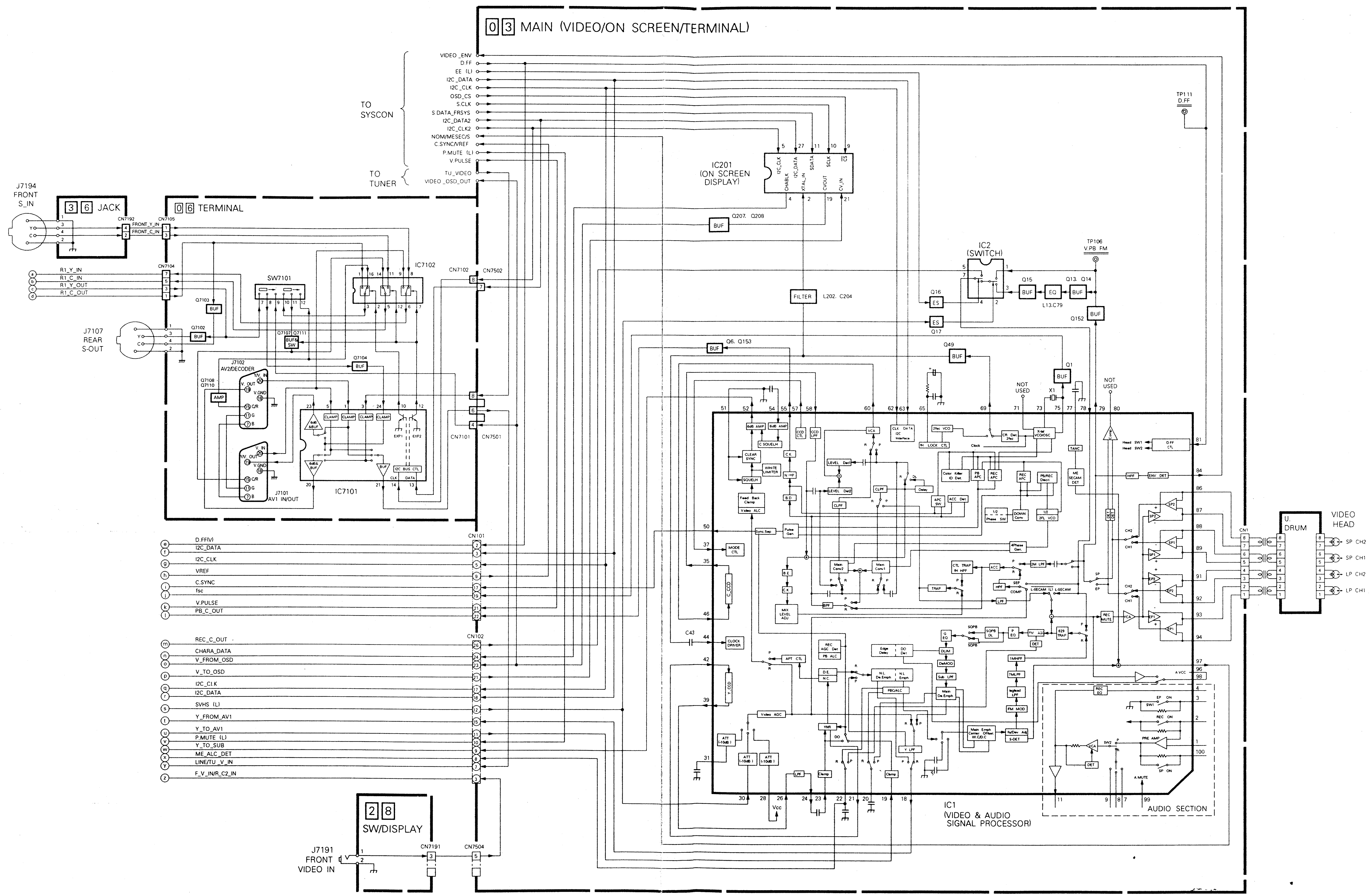


0 5 3D SVHS (VIDEO/ 3D/TBC)
IC1401
DFFI
SDATA
SCLK
VR
10
8
7
12
PS com/CNR
3L COMB
Y COMB
REC
PB
COUT
YOUT
75
73
FSCIN
CIN
VYIN
2
87
82
Q1406, L1404
L1405,
C1414 - C1418
BPF
Q1405
BUF
Q1408, L1406
C1421, C1422
LPF
Q1407
BUF
Q1403, L1401
C1405 - C1407
C1409
BPF
Q1402
BUF
Q1404
BUF
IC1006
AGC
BGP GEN
DET
PHASE SHIFT
PILOT DET
PILOT BLANK
OFF /ON
NOT USED
14
13
12
11
17
1
4
6
7
8
9
Q1006, Q1007
BUF
Q1012, Q1014,
Q1015
BUF
TP1001
FSC PHASE
Q1005
SW
D1004
D1003
Q1021
BUF
V.PULSE
IC1001
(Y/C SWITCH)
41
39
37
35
33
32
31
29
28
26
25
24
23
21
19
18
17
16
15
43
44
45
46
48
50
51
52
53
54
55
56
1
3
5
7
8
9
10
11
13
14
CLAMP
ON/OFF
LPF2
EQ1
3DEE
SS
3DPB
SW23
EE-SEP
SW21
PB30
EE-SS
SW7
SW8
BPF
CLAMP
SW2
PB
EE
ATT
SW1
COM
AGC
DET
S. Sep
MIN
MAX
VREF
MUTE
6dB
SW11
ATT
CLAMP
SW5
C-ADJ2
FBC
MUTE
6dB
P.MUTE(L)
LIM
PB ON
SW13
FBC
MUTE
6dB
R_V_IN
F_V_IN
SW24
TU
SP/LP
ATT
LPF1
FBC
SW22
SS
EE.SEP
30
SW6
SW9
N.C
CLAMP
ATT
SW14 PB
EE
SW3 VHS
REC
N/S-LPF
SW4
EE
PB
CLAMP
EQ
CLAMP
SW10
CLAMP
SW CTL
BUF
I²C Interface
to filter
CR adj
BUF
Vcc
NOT USED
CHARA_DATA
L1004, C1011
FILTER
R1003, C1010
FILTER
Q1016
SW
P.MUTE(L)
IC1002
EP
SP
REC
PB
NL PROCESS
SP/LP
10
11
12
17
18
16
6
5
1
R1010, R1012
C1041, C1043
EQ
R1011, R1013, R1014
C1042, C1044
EQ
R1017, R1018, R1020
C1048, C1049
EQ
R1016, R1019, R1021
C1047, C1050
EQ
CN1003
7 R1_Y_IN a
5 R1_C_IN b
3 R1_Y_OUT c
1 R1_C_OUT d
CN1001
2 D.FF(V) e
3 I2C_DATA f
5 I2C_CLK g
9 VREF h
17 C.SYNC i
19 fsc j
21 V.PULSE k
22 PB_C_OUT l
V.PULSE
CN1002
26 REC_C_OUT m
24 CHARA_DATA n
23 V_FROM_OSD o
21 V_TO_OSD p
17 I2C_CLK q
18 I2C_DATA r
12 SVHS (L) s
15 Y_FROM_AV1 t
11 Y_TO_AV1 u
10 P.MUTE(L) v
9 Y_TO_SUB w
8 ME_ALC_DET x
7 LINE/TU_V_IN y
3 F_V_IN/R_C2_IN z
CHARA_DATA
P.MUTE(L)

4.29 VIDEO BLOCK DIAGRAM (VSH 2050)

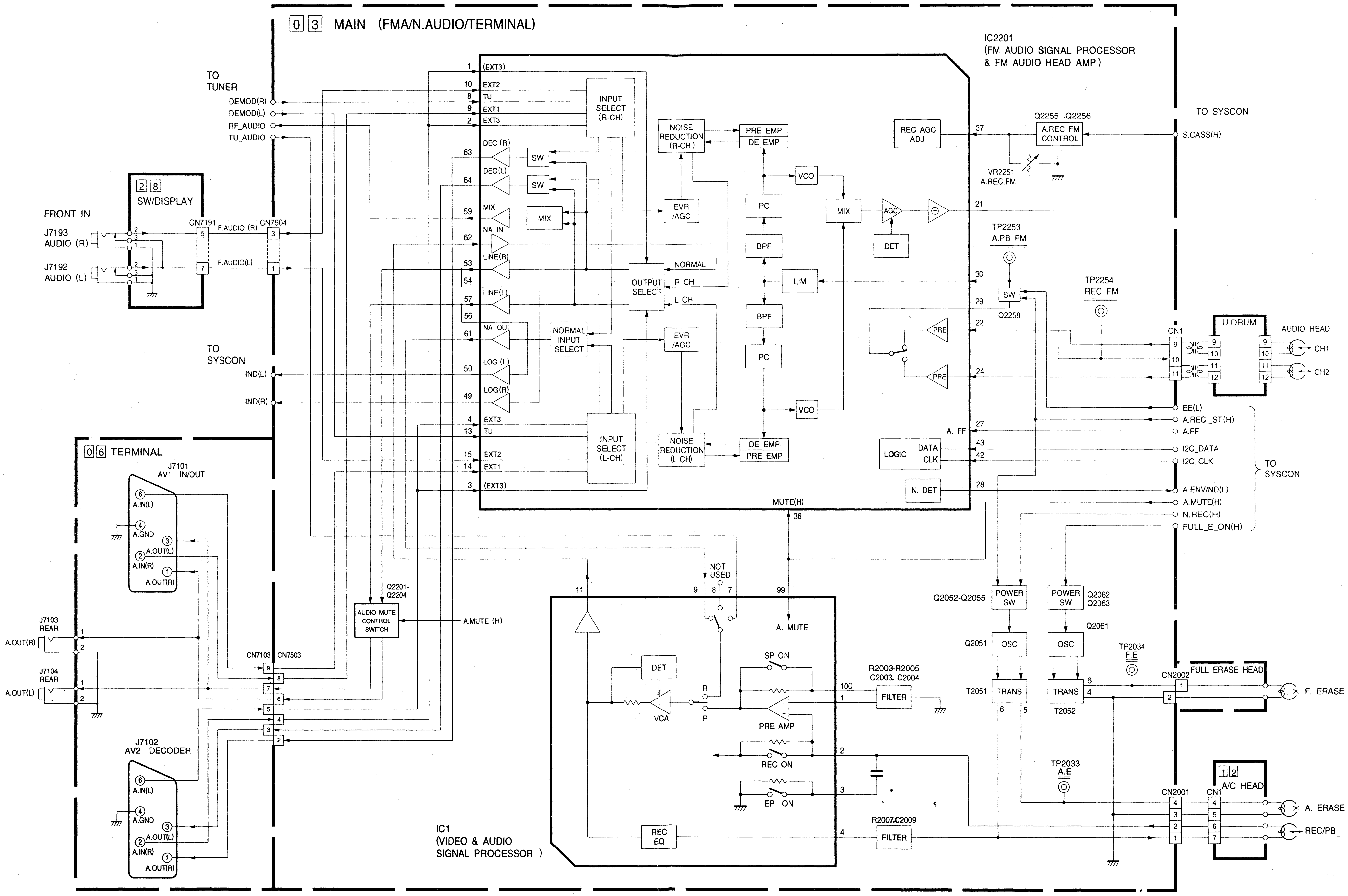

05 2D SVHS (VIDEO/ 2D Y/C)
IC1006
Q1006, Q1007
BUF
AGC
BGP GEN
PB REC
Q1012, Q1014, Q1015
TP1001 P.BURST LEVEL
NOT USED
DET
PHASE SHIFT
PILOT DET
OFF /ON
Q1005
D1003
PILOT BLANK
IC1201 (Y/C SEP & MIX)
PS com/CNR
3L COMB
Y COMB
COUT
YOUT
MODE1
MODE2
MODE3
FSCIN
CIN
VYIN
L1205, L1207 C1233 - C1237
Q1215
BPF
L1206 C1229, C1230
Q1212
LPF
Q1203
SW
PAL_NTSC(L)
Q1205, Q1206 Q1218, Q1219
Q1209, L1204 C1224 - C1226
Q1210
IC1001 (Y/C SWITCH)
V.PULSE
CLAMP
3D ON/OFF
LPF2
EQ1
3DEE
SS
3DPB
SW23
EE. SEP
SW21
PB3D
EE. SS
SW7
SW8
PS CONV
SW1
Sep
Com
SW2
PB
EE
ATT
AGC
DET
S. Sep
MIN
MAX
VREF
SW5
C. ADJ2
SW11
BB
MUTE
6dB
C MUTE
CHARA _DATA
FBC
P.MUTE(L)
BF
SW13
LIM
PB ON
LPF1
SW22
SW6
NOTCH
SW9
N. C
R_V_IN
F_V_IN
SW24
TU
SP/EP
L1004 C1011
FILTER
R1003, C1010
Q1016
P.MUTE(L)
SW14 PB
SW3 VHS
SVHS
REC
N/S-LPF
SW4
EQ
SW10
SW CTL
I²C Interface
to filter
CR adj
IC1002
R1010, R1012 C1041, C1043
R1011, R1013, R1014 C1042, C1044
EP
SP
NL PROCESS
R1017, R1018, R1020 C1048, C1049
R1016, R1019, R1021 C1047, C1050
CN1003
R1_Y_IN
R1_C_IN
R1_Y_OUT
R1_C_OUT
CN1001
C.SYNC
fsc
V.PULSE
PB_C_OUT
REAR1(L)/PAL_NTSC(L)
PAL_NTSC(L)
CN1002
REC_C_OUT
CHARA _DATA
V_FROM_OSD
V_TO_OSD
I2C_CLK
I2C_DATA
SVHS (L)
Y_FROM_AV1
Y_TO_AV1
P.MUTE(L)
Y_TO_SUB
ME_ALC_DET
LINE/TU _V_IN
F_V_IN/R_C2_IN
a
b
c
d
e
f
g
h
i
j
k
l
m
n
o
p
q
r
s
t
u
v
w


03 MAIN (VIDEO/ON SCREEN/TERMINAL)
TO SYSCON
VIDEO_ENV
D.FF
EE (L)
I2C_DATA
I2C_CLK
OSD_CS
S.CLK
S.DATA_FRSYS
I2C_DATA2
I2C_CLK2
NOM/MESECAS
C.SYNC/VREF
P.MUTE (L)
PAL/NTSC (L)
V.PULSE
TO TUNER
TU_VIDEO
VIDEO_OSD_OUT
IC201 (ON SCREEN DISPLAY)
Q207, Q208
BUF
FILTER
L202, C204
IC2 (SWITCH)
TP106 V.PB FM
TP111 D.FF
Q15
Q13, Q14
EQ
L13,C79
Q152
Q16
Q17
ES
Q6, Q153
Q49
Q1
X1
NOT USED
J7194 FRONT S_IN
36 JACK
CN7192
FRONT_Y_IN
FRONT_C_IN
CN7105
06 TERMINAL
CN7104
R1_Y_IN
R1_C_IN
R1_Y_OUT
R1_C_OUT
SW7101
IC7102
CN7102
CN7502
Q7103
Q7102
J7107 REAR S-OUT
Q7107, Q7111
BUF & SW
Q7104
J7102 AV2/DECODER
Q7108, Q7110
AMP
CLAMP
6dB AMP
I2C BUS CTL
IC7101
J7101 AV1 IN/OUT
CN7101
CN7501
CN101
C.SYNC
fsc
V.PULSE
PB_C_OUT
REAR1(L)/PAL_NTSC(L)
CN102
REC_C_OUT
CHARA_DATA
V_FROM_OSD
V_TO_OSD
I2C_CLK
I2C_DATA
SVHS (L)
Y_FROM_AV1
Y_TO_AV1
P.MUTE (L)
Y_TO_SUB
ME_ALC_DET
LINE/TU_V_IN
C43
IC1 (VIDEO SIGNAL & AUDIO PROCESSOR)
AUDIO SECTION
CN1
U. DRUM
VIDEO HEAD
SP CH2
SP CH1
LP CH2
LP CH1



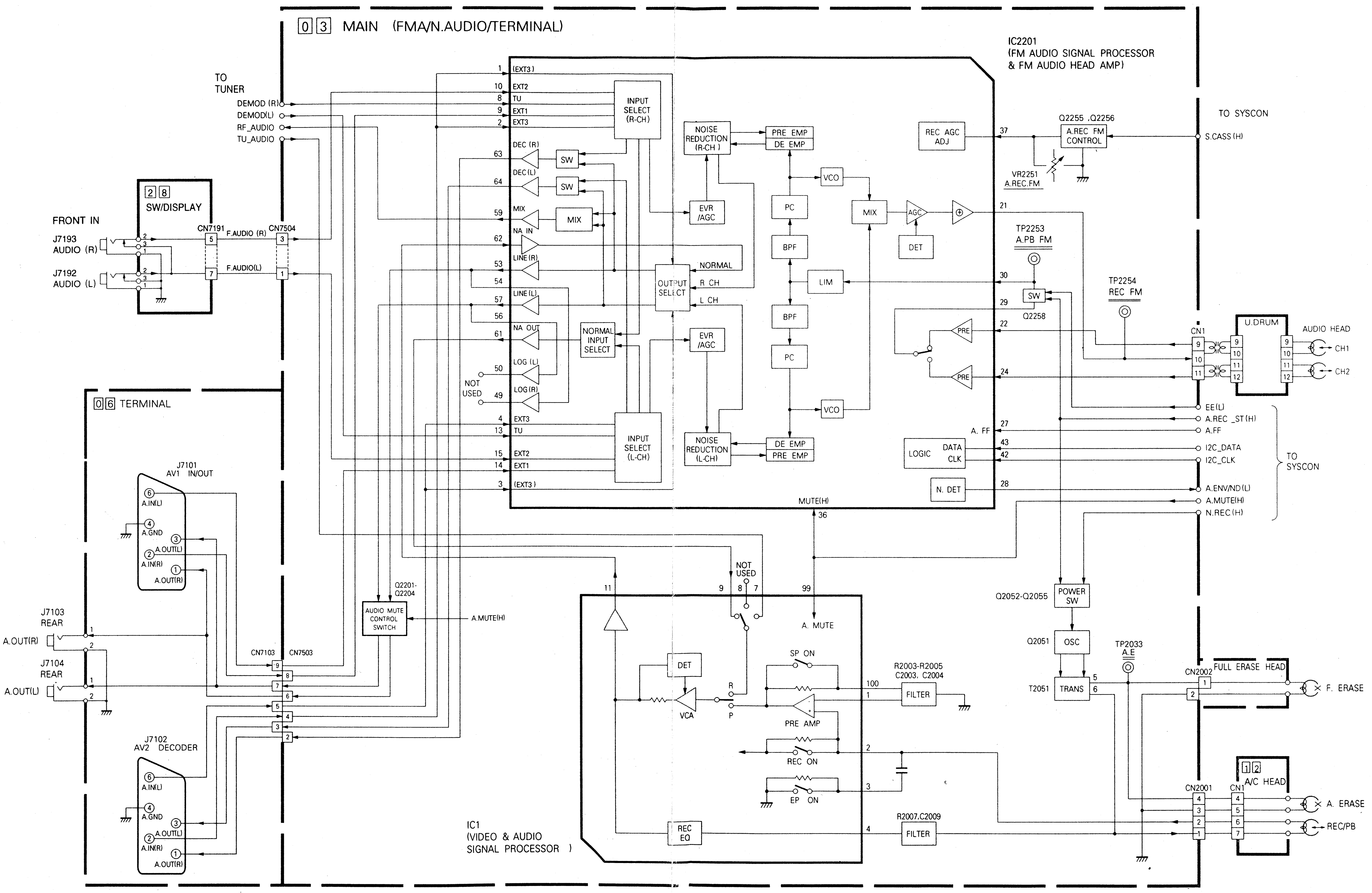
0 3 MAIN (VIDEO/ON SCREEN/TERMINAL)
VIDEO_ENV
D.FF
EE (L)
I2C_DATA
I2C_CLK
OSD_CS
S.CLK
S.DATA_FRSYS
I2C_DATA2
I2C_CLK2
NOM/MESEC/S
C.SYNC/VREF
P.MUTE (L)
V.PULSE
TO SYSCON
TU_VIDEO
VIDEO_OSD_OUT
TO TUNER
IC201 (ON SCREEN DISPLAY)
I2C_CLK
I2C_DATA
SDATA
SCLK
CS
CHABLK
XTAL_IN
CVOUT
CV_IN
BUF
Q207, Q208
FILTER
L202, C204
TP111 D.FF
TP106 V.PB FM
IC2 (SWITCH)
Q15
Q13, Q14
L13,C79
Q152
Q16
ES
Q17
Q6, Q153
Q49
Q1
NOT USED
X1
J7194 FRONT S_IN
3 6 JACK
CN7192
FRONT_Y_IN
FRONT_C_IN
CN7105
0 6 TERMINAL
CN7104
R1_Y_IN
R1_C_IN
R1_Y_OUT
R1_C_OUT
SW7101
IC7102
CN7102
CN7502
Q7103
Q7102
J7107 REAR S-OUT
Q7107 Q7111
BUF/SW
Q7104
J7102 AV2/DECODER
Q7108 Q7110
AMP
V_OUT
Y/V_IN
V.GND
C/R
G
B
CLAMP
6dB & BUF
I2C BUS CTL
CLK DATA
EXP1 EXP2
J7101 AV1 IN/OUT
IC7101
CN7101
CN7501
CN101
D.FF(V)
I2C_DATA
I2C_CLK
VREF
C.SYNC
fsc
V.PULSE
PB_C_OUT
CN102
REC_C_OUT
CHARA_DATA
V_FROM_OSD
V_TO_OSD
I2C_CLK
I2C_DATA
SVHS (L)
Y_FROM_AV1
Y_TO_AV1
P.MUTE (L)
Y_TO_SUB
ME_ALC_DET
LINE/TU_V_IN
F_V_IN/R_C2_IN
2 8 SW/DISPLAY
J7191 FRONT VIDEO IN
CN7191
CN7504
IC1 (VIDEO & AUDIO SIGNAL PROCESSOR)
AUDIO SECTION
C_CCD
Y CCD
C43
MODE CTL
CLOCK DRIVER
MIX LEVEL ADJ
Video AGC
ATT (-10dB)
APT CTL
REC AGC Det
PB ALC
D.E
N.C
N.L De-Emph
Main De-Emph
YNR
DO
Y LPF
LPF
Clamp
Edge Delay
DO Det
DLIM
DeMOD
Sub LPF
FM MOD
S-DET
REC EQ
SW1
SW2
EP ON
REC ON
PRE AMP
SP ON
A.MUTE
VCA
DET
A VCC
Head SW1
Head SW2
D.FF CTL
HPF
ENV DET
REC MUTE
U. DRUM
CN1
VIDEO HEAD
SP CH2
SP CH1
LP CH2
LP CH1
Vcc

4.30 AUDIO BLOCK DIAGRAM (VSH 2080)



03 MAIN (FMA/N.AUDIO/TERMINAL)
IC2201
(FM AUDIO SIGNAL PROCESSOR
& FM AUDIO HEAD AMP)
TO TUNER
DEMOD(R)
DEMOD(L)
RF_AUDIO
TU_AUDIO
28 SW/DISPLAY
FRONT IN
J7193 AUDIO (R)
J7192 AUDIO (L)
CN7191
CN7504
F.AUDIO (R)
F.AUDIO(L)
TO SYSCON
IND(L)
IND(R)
(EXT3)
EXT2
TU
EXT1
EXT3
DEC (R)
DEC(L)
MIX
NA IN
LINE(R)
LINE(L)
NA OUT
LOG (L)
LOG(R)
INPUT SELECT (R-CH)
INPUT SELECT (L-CH)
SW
MIX
OUTPUT SELECT
NORMAL
R CH
L CH
NORMAL INPUT SELECT
NOISE REDUCTION (R-CH)
NOISE REDUCTION (L-CH)
EVR /AGC
PRE EMP
DE EMP
PC
BPF
LIM
VCO
AGC
DET
REC AGC ADJ
Q2255 ,Q2256
A.REC FM CONTROL
VR2251 A.REC.FM
S.CASS(H)
TP2253 A.PB FM
TP2254 REC FM
SW
Q2258
PRE
A. FF
LOGIC
DATA
CLK
N. DET
MUTE(H)
CN1
U.DRUM
AUDIO HEAD
CH1
CH2
EE(L)
A.REC _ST(H)
A.FF
I2C_DATA
I2C_CLK
A.ENV/ND(L)
A.MUTE(H)
N.REC(H)
FULL_E_ON(H)
TO SYSCON
06 TERMINAL
J7101 AV1 IN/OUT
A.IN(L)
A.GND
A.OUT(L)
A.IN(R)
A.OUT(R)
J7103 REAR A.OUT(R)
J7104 REAR A.OUT(L)
J7102 AV2 DECODER
Q2201-Q2204
AUDIO MUTE CONTROL SWITCH
A.MUTE (H)
CN7103
CN7503
NOT USED
A. MUTE
DET
VCA
R
P
SP ON
PRE AMP
REC ON
EP ON
REC EQ
IC1
(VIDEO & AUDIO SIGNAL PROCESSOR)
R2003-R2005 C2003, C2004
FILTER
R2007,C2009
FILTER
Q2052-Q2055
POWER SW
Q2062 Q2063
POWER SW
Q2061
Q2051
OSC
OSC
T2051
TRANS
TRANS
T2052
TP2034 F.E
TP2033 A.E
CN2002
FULL ERASE HEAD
F. ERASE
CN2001
12 A/C HEAD
A. ERASE
REC/PB

4.31 AUDIO BLOCK DIAGRAM (VSH 2050)


03 MAIN (FMA/N.AUDIO/TERMINAL)
IC2201
(FM AUDIO SIGNAL PROCESSOR
& FM AUDIO HEAD AMP)
TO TUNER
DEMOD (R)
DEMOD(L)
RF_AUDIO
TU_AUDIO
28 SW/DISPLAY
FRONT IN
J7193 AUDIO (R)
J7192 AUDIO (L)
CN7191
CN7504
F.AUDIO (R)
F.AUDIO(L)
(EXT3)
EXT2
TU
EXT1
EXT3
INPUT SELECT (R-CH)
DEC (R)
DEC (L)
SW
MIX
NA IN
LINE (R)
LINE (L)
NA OUT
LOG (L)
LOG (R)
NOT USED
OUTPUT SELECT
NORMAL
R CH
L CH
NORMAL INPUT SELECT
INPUT SELECT (L-CH)
NOISE REDUCTION (R-CH)
NOISE REDUCTION (L-CH)
EVR /AGC
PRE EMP
DE EMP
PC
BPF
LIM
VCO
AGC
DET
REC AGC ADJ
LOGIC
DATA
CLK
N. DET
A. FF
MUTE(H)
PRE
Q2255 ,Q2256
A.REC FM CONTROL
VR2251 A.REC.FM
TP2253 A.PB FM
TP2254 REC FM
Q2258
TO SYSCON
S.CASS (H)
CN1
U.DRUM
AUDIO HEAD
CH1
CH2
EE(L)
A.REC _ST(H)
A.FF
I2C_DATA
I2C_CLK
A.ENV/ND(L)
A.MUTE(H)
N.REC(H)
TO SYSCON
06 TERMINAL
J7101 AV1 IN/OUT
A.IN(L)
A.GND
A.OUT(L)
A.IN(R)
A.OUT(R)
J7103 REAR
A.OUT(R)
J7104 REAR
A.OUT(L)
J7102 AV2 DECODER
CN7103
CN7503
Q2201-Q2204
AUDIO MUTE CONTROL SWITCH
A.MUTE(H)
NOT USED
A. MUTE
DET
VCA
R
P
SP ON
PRE AMP
REC ON
EP ON
REC EQ
IC1
(VIDEO & AUDIO SIGNAL PROCESSOR)
R2003-R2005 C2003, C2004
FILTER
R2007,C2009
Q2052-Q2055
POWER SW
Q2051
OSC
T2051
TRANS
TP2033 A.E
CN2002
FULL ERASE HEAD
F. ERASE
CN2001
12 A/C HEAD
A. ERASE
REC/PB